INSTALLATION MANUAL
FOR
DIMPLEX SOLAR PHOTOVOLTAIC KITS

Dimplex renewables®
A world of expertise

Please read this manual carefully before installing the system and carry out the installation procedures as per the instructions.

DXPVP052 Issue: 2

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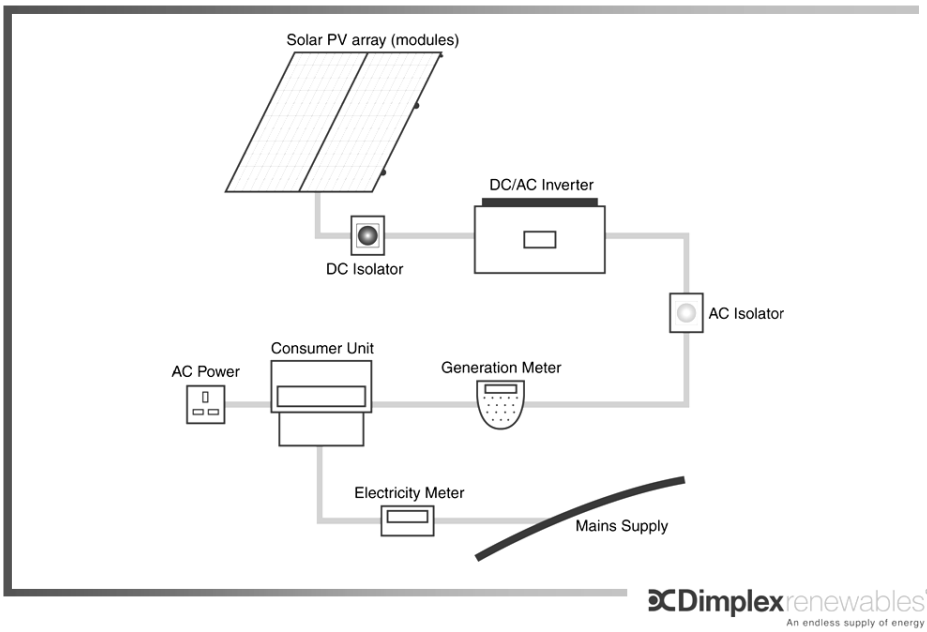
Preface

What is a Solar PV system?

Most electricity in the UK is currently generated by burning fossil fuels. This releases carbon dioxide and other gases into the atmosphere which contributes to climate change. A Dimplex Solar Photovoltaic (PV) system converts sunlight directly into electricity cleanly and silently without creating any carbon emissions. The electricity generated is used in the building in the same way as the electricity purchased from an energy supplier. Harnessing the sun's energy and converting it into electricity will reduces fuel bills and at the same time reduces a building's impact on the environment.

How does it work?

When light protons hit silicon in a solar PV cell, electrical energy is created in the form of Direct Current (D.C.) This electricity flows from the array via a D.C. cable through a D.C. isolator and is collected at the inverter which is often located in the roof space. The inverter converts the D.C. electricity to Alternating Current (A.C.) so that it can be used within the building. The now A.C. electricity is passed to the building's electricity system via an A.C. isolator and generation meter. The electricity generated by the PV system works hand in hand with the existing electrical supply to power appliances and lighting. During the day sufficient electricity can be generated by the system for all of the building's electrical needs. If not, this will be supplemented by the normal electricity supply from the grid. If during the day more electricity is generated than required this excess will be fed back to the main electricity grid. The electricity purchased from the grid is sold in electrical units. An electrical unit as itemised on electricity bills is also known as a kilowatt hour (kWh). The generation meter records the amount of electricity or units the system generates.



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SECTION 1: INTRODUCTION

The purpose of this document is to provide information for the owner and guidelines for the installer to help ensure that the Dimplex Solar Photovoltaic (PV) system is properly installed and operates to its designed potential. This document sets out key criteria that describe a quality system and key design and installation considerations that should be met in order to achieve this goal. This document deals with roof mounted systems and is applicable for the following Dimplex kit models:

SMA Plain Tile	POWERONE Plain Tile
DXPV138/230/2/3PT	DXPV138/230/2/3(P)PT
DXPV184/230/2/4PT	DXPV184/230/2/4(P)PT
DXPV207/230/3/3PT	DXPV207/230/3/3(P)PT
DXPV230/230/2/5PT	DXPV230/230/2/5(P)PT
DXPV276/230/2/6PT	DXPV276/230/2/6(P)PT
DXPV276/230/3/4PT	DXPV276/230/3/4(P)PT
DXPV276/230/4/3PT	DXPV276/230/4/3(P)PT
DXPV345/230/3/5PT	DXPV345/230/3/5(P)PT
DXPV368/230/2/8PT	DXPV368/230/2/8(P)PT
DXPV368/230/4/4PT	DXPV368/230/4/4(P)PT
DXPV414/230/3/6PT	DXPV414/230/3/6(P)PT
DXPV460/230/2/10PT	DXPV460/230/2/10(P)PT
DXPV460/230/4/5PT	DXPV460/230/4/5(P)PT
DXPV552/230/4/6PT	DXPV552/230/4/6(P)PT
SMA Slate	**POWERONE Slate**
DXPV138/230/2/3S	DXPV138/230/2/3(P)S
DXPV184/230/2/4S	DXPV184/230/2/4(P)S
DXPV207/230/3/3S	DXPV207/230/3/3(P)S
DXPV230/230/2/5S	DXPV230/230/2/5(P)S
DXPV276/230/2/6S	DXPV276/230/2/6(P)S
DXPV276/230/3/4S	DXPV276/230/3/4(P)S
DXPV276/230/4/3S	DXPV276/230/4/3(P)S
DXPV345/230/3/5S	DXPV345/230/3/5(P)S
DXPV368/230/2/8S	DXPV368/230/2/8(P)S
DXPV368/230/4/4S	DXPV368/230/4/4(P)S
DXPV414/230/3/6S	DXPV414/230/3/6(P)S
DXPV460/230/2/10S	DXPV460/230/2/10(P)S
DXPV460/230/4/5S	DXPV460/230/4/5(P)S
DXPV552/230/4/6S	DXPV552/230/4/6(P)S

These systems should be installed by competent installers who have completed a PV installer training course. In order for th owner to collect the Feed-in Tariff the installer also needs to be MCS accredite.

Dimplex has worked closely with Logic Certification in the development of a Solar Photovoltaic training course. This Logic Certification accredited course forms the basis of Dimplex Accredited Installer training for PV and candidates who successfully complete training with Dimplex will not only achieve Dimplex Accredited Installer status, but also be automatically registered with Logic Certification.

Please visit our website http://www.dimplexrenewables.co.uk/ to learn more about Dimplex Solar Photovoltaic Systems Training and how to become MCS installer certified.

Thank you for choosing Dimplex solar photovoltaic kits. With proper operation and maintenance, our kits will provide you with clean, renewable solar electricity for many years.

This manual does not list all precautions needed for safe work. Any PV system must comply with Health and Safety Requirements and other relevant standards and Codes of Practice. This manual provides guidelines for installation, but it does not guarantee the quality of installation work. Please complete all work in a responsible and professional manner. Electrical work should be performed by a qualified electrician. For full information on PV design and installation, refer to the Photovoltaic's in Buildings Guide to the installation of PV systems 2nd Edition (DTI/Pub URN 06/1972) and BS 7671.

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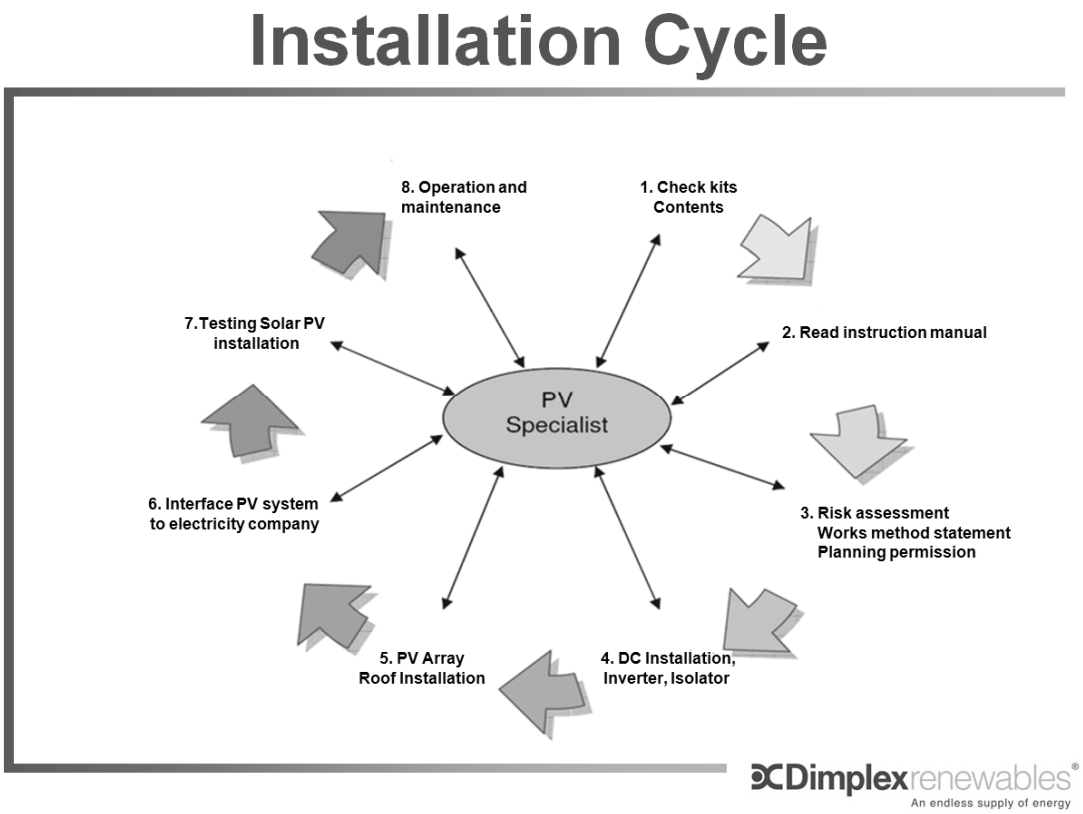
SECTION 2. INSTALLATION CYCLE

The scope of this document includes the installation of the PV array to the roof and the connection of the D.C. wiring to the inverter and provides information regarding the A.C. wiring required to connect the inverter into the building's electricity supply.

A typical project cycle for a Dimplex solar photovoltaic kit is shown below. It shows consideration of the PV system from the start of the project, through the stages of installation and commissioning finishing with operation and maintenance.



2.1 Check Kit Contents

Check kit contents prior to installation. Every kit contains a part list with component descriptions and quantities. Ensure all components and quantities are present before starting the installation project.

2.2 Read Instruction Manual

All of the instructions should be thoroughly read and understood before attempting to install, wire, operate and maintain the Dimplex photovoltaic kits. Contact with electrically active parts of the kits such as terminals can result in burns, sparks, and lethal shock whether the module is connected or disconnected. The installation of solar modules requires a great degree of skill and should only be performed by a qualified licensed professional, including, without limitation, licensed contractors and licensed electricians. Keep this manual for reference.

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SECTION 3. RISK ASSESSMENT/PLANNING PERMISSION

Dimplex solar PV packages bring together high efficiency PV modules with an inverter, roof mounting system, generation meter and associated cables and isolators to create a solution for residential and light commercial properties. Designed for both retro fit and new build projects, the systems protrude less than 200mm above the roof and so are classed as permitted development in both England, Scotland and Wales do not require planning permission in non-conservation areas. Despite the recent changes to legislation we recommend in all cases that you check with your local planning authority before you commit to installing our solar PV kits. This document does not address health and safety matters, a risk assessment and works method statement should be completed prior to commencing the installation.

SECTION 4. INSTALL D.C. COMPONENTS

- ***Step 1*: Identify a suitable location for the inverter (DXPVI0000) or DXPVI0000(P)) preferably in the loft or attic space.**

  - Make sure the location is not easily accessible by children and in an area free from explosive or corrosive atmospheres.
  - For residential installations the inverter is typically located in the attic or loft space.
  - The inverter must be mounted vertically on a wall or pole.
  - **Do not** mount horizontally as adequate heat dissipation cannot be ensured.
  - Make sure the Inverter is mounted in a location where the ambient temperature range is –25 to +65 ℃. The Inverter may derate power output and shut down if it gets too hot. Also at extremely cold temperatures, the front panel LCD may not function normally.
  - A space of at least 300mm to 500mm around the enclosure guarantees optimum ventilation, if necessary use forced fan ventilation.
  - Unless walls are properly insulated, avoid mounting the inverter on any wall that is directly exposed to the sun or a heat source such as back boiler wall.
  - Only work on the inverter when it is fully disconnected and observe the heat sink temperature. Work should only be carried out by qualified personnel.

  To minimize resistance and resulting power loss, make sure the wire lengths between the PV array and the inverter and between the inverter and the main utility service panel are kept to a minimum.

  A 10 meter D.C. cable is included in the kit contents to connect the solar PV array on the roof to the inverter and is routed through the over lap in the roof membrane into the attic space.

  Ensure the inverter is mounted directly below this cable entry to ensure successful connection to the inverter.

  If the inverter has an integrated D.C. isolator ensure it is in the off position.

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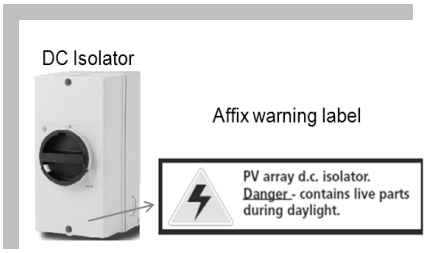
Refer to the installation manual of the inverter manufacturer for further installation procedures and guidelines.

- ***Step 2*: Identify a suitable location for the D.C. isolator (DXPVDC1, 2 or 3), preferably located adjacent to the inverter (DXPVI0000) or (DXPVI0000(P)).**



  - The D.C. isolator provides a means of manually electrically isolating the entire PV array. Such electrical isolation is required during system installation and any subsequent system maintenance or repair work.
  - The isolator should be located adjacent to, or integrated in the inverter.
  - Ensure the isolator is in the off position before any work is carried out.
  - An additional D.C. isolator may be specified for systems with long D.C. cable runs (typically at the point of cable entry into the building) – so as to provide a means of isolating the cable for safety reasons or maintenance works.
  - *The D.C. isolator(s) must be affixed with the label 'PV array D.C.isolator' which is contained in the kit contents (DXPVWLPK1).*

- ***Step3*: Route the supplied D.C. 10 meter cable's DXPVC10/1 and DXPVC10/2 through the overlap in the roof membrane from the attic space.**

  - This D.C. cable should be positioned and secured to the rafters and labelled D.C. power do not disconnect under load.
  - The cables used for wiring the D.C. section of a grid-connected PV system need to withstand the environmental, voltage and current conditions at which they may be expected to operate. This includes heating effects of both current and solar gain.
  - Should the installer require additional cable please contact Dimplex for specifications. If the D.C. 10 meter cable's included in the kit contents is not used then the maximum distances will depend on the wire gauges used and PV array output voltages.

To comply with the current version of BS 7671.The installer must secure coloured cable sleeves to the cables as follows:

Positive cable – Brown sleeve
Negative cable – Grey sleeve

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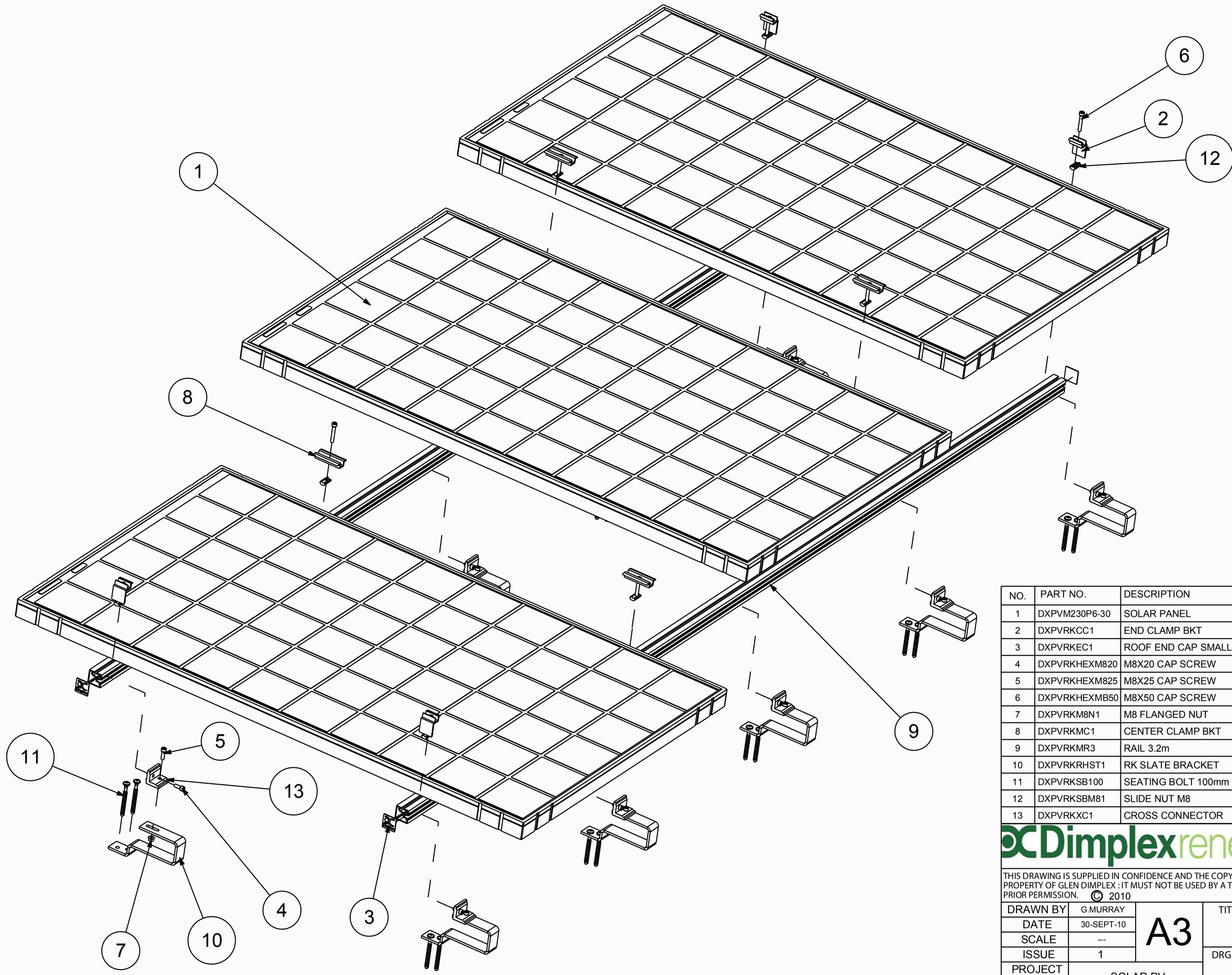
EXAMPLE OF A 1x3 SOLAR SYSTEM FOR SLATE ROOFS



NO.	PART NO.	DESCRIPTION	QTY
1	DXPVM230P6-30	SOLAR PANEL	3
2	DXPVRKCC1	END CLAMP BKT	4
3	DXPVRKEC1	ROOF END CAP SMALL	4
4	DXPVRKHEXM820	M8X20 CAP SCREW	10
5	DXPVRKHEXM825	M8X25 CAP SCREW	10
6	DXPVRKHEXMB50	M8X50 CAP SCREW	8
7	DXPVRKM8N1	M8 FLANGED NUT	10
8	DXPVRKMC1	CENTER CLAMP BKT	4
9	DXPVRKMR3	RAIL 3.2m	2
10	DXPVRKRHST1	RK SLATE BRACKET	10
11	DXPVRKSB100	SEATING BOLT 100mm	20
12	DXPVRKSBM81	SLIDE NUT M8	8
13	DXPVRKXC1	CROSS CONNECTOR	10

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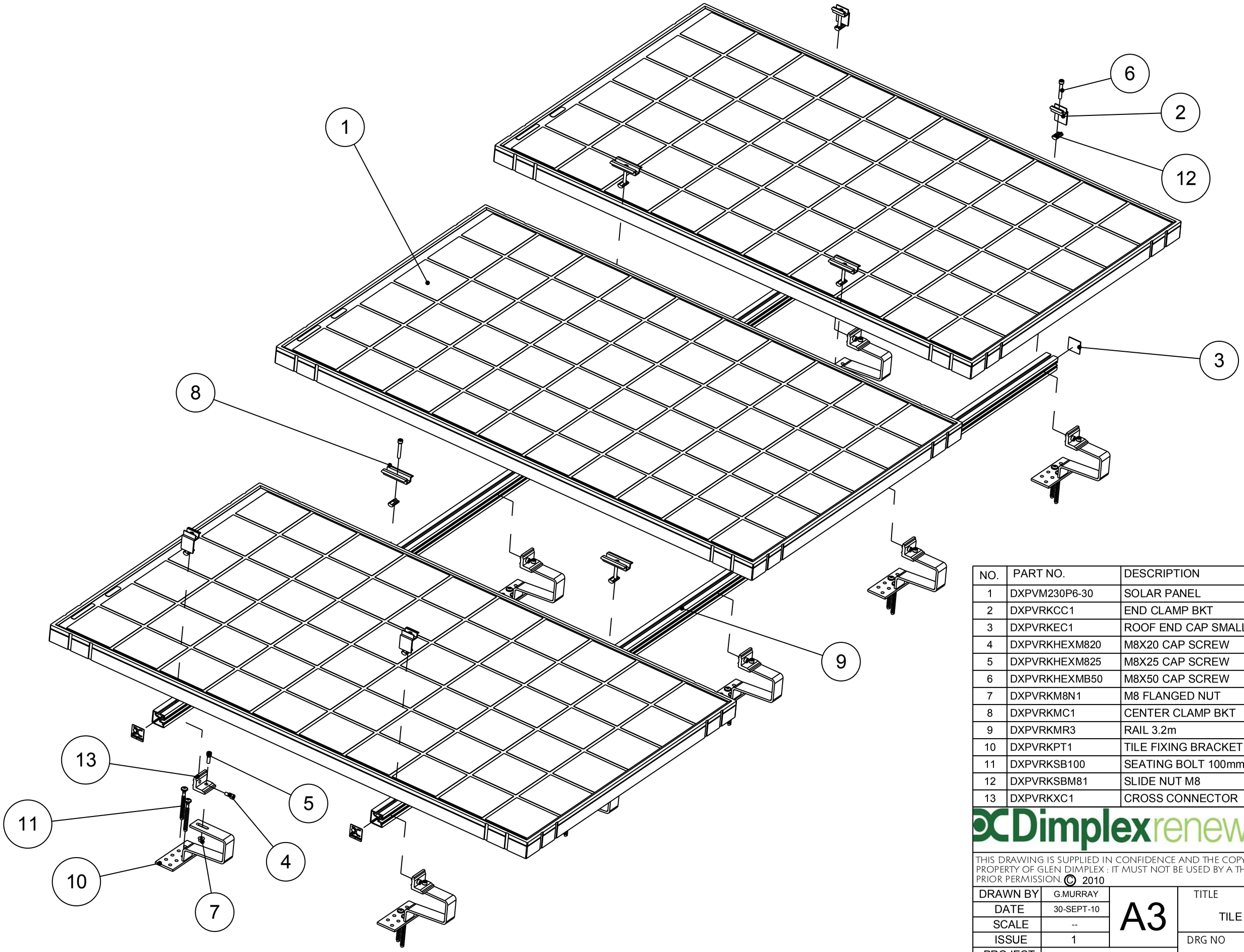
DRAWN BY	G.MURRAY	A3	TITLE: SLATE 1 X 3 SYSTEM
DATE	30-SEPT-10		
SCALE	---		
ISSUE	1		DRG NO
PROJECT	SOLAR PV		

EXAMPLE OF A 1x3 SOLAR SYSTEM FOR TILE ROOFS



NO.	PART NO.	DESCRIPTION	QTY
1	DXPVM230P6-30	SOLAR PANEL	3
2	DXPVRKCC1	END CLAMP BKT	4
3	DXPVRKEC1	ROOF END CAP SMALL	4
4	DXPVRKHEXM820	M8X20 CAP SCREW	10
5	DXPVRKHEXM825	M8X25 CAP SCREW	10
6	DXPVRKHEXMB50	M8X50 CAP SCREW	8
7	DXPVRKM8N1	M8 FLANGED NUT	10
8	DXPVRKMC1	CENTER CLAMP BKT	4
9	DXPVRKMR3	RAIL 3.2m	2
10	DXPVRKPT1	TILE FIXING BRACKET	10
11	DXPVRKSB100	SEATING BOLT 100mm	20
12	DXPVRKSBM81	SLIDE NUT M8	8
13	DXPVRKXC1	CROSS CONNECTOR	10

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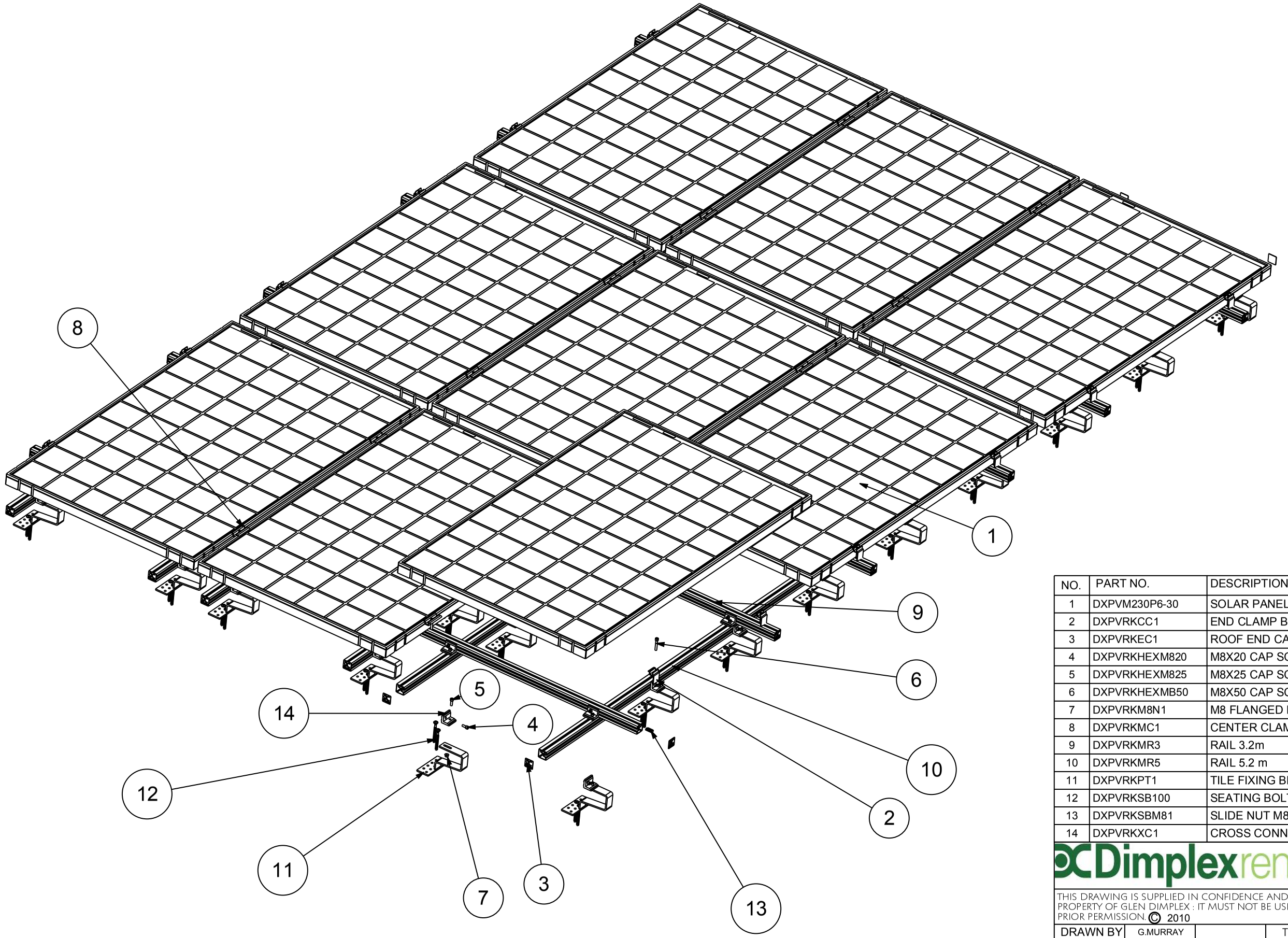
DRAWN BY	G.MURRAY	A3	TITLE: TILE 1X3 SYSTEM
DATE	30-SEPT-10		
SCALE	--		
ISSUE	1		DRG NO
PROJECT	SOLAR PV		

EXAMPLE OF A 3x3 LANDSCAPE SOLAR SYSTEM FOR TILE ROOFS WITH RAFTERS 600mm APART



NO.	PART NO.	DESCRIPTION	QTY
1	DXPVM230P6-30	SOLAR PANEL	9
2	DXPVRKCC1	END CLAMP BKT	12
3	DXPVRKEC1	ROOF END CAP SMALL	24
4	DXPVRKHEXM820	M8X20 CAP SCREW	126
5	DXPVRKHEXM825	M8X25 CAP SCREW	54
6	DXPVRKHEXMB50	M8X50 CAP SCREW	25
7	DXPVRKM8N1	M8 FLANGED NUT	54
8	DXPVRKMC1	CENTER CLAMP BKT	13
9	DXPVRKMR3	RAIL 3.2m	6
10	DXPVRKMR5	RAIL 5.2 m	6
11	DXPVRKPT1	TILE FIXING BRACKET	54
12	DXPVRKSB100	SEATING BOLT 100mm	108
13	DXPVRKSBM81	SLIDE NUT M8	61
14	DXPVRKXC1	CROSS CONNECTOR	90

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DRAWN BY	G.MURRAY	A3	TITLE
DATE	12-OCT-10		TILE 3X3 LANDSCAPE SYSTEM
SCALE	--		
ISSUE	1		DRG NO
PROJECT	SOLAR PV		

LIST OF ROOF KIT COMPONENTS		
(1) Stainless steel hooks slate/tile	(2) Countersunk wood screws 8 x100	(3) Medium mounting rail
(4) Cross connector	(5) Cylinder head Allen screw A2, M8 x 20	(6) Self-locking nut, A2, M8, DIN
(7) Rail connector fixed	(8) Rail connector, flexible 40x 40 mm	(9) Sliding Slot nut
(10) Middle Clamp plate	(11) Corner Clamp plate	(12) Cylinder head Allen screw M8 x 50
(13) Dimplex rail End Cap	(14) Cable ties UV-resistant	(15) Cylinder head Allen screw M8 x 25

NOTE: the numbers given in the table overleaf to identify the different components will be referenced throughout this installation manual.

Two people are required to carry out the installation

Tools required

The list of tools below will be required to install the PV module free standing kit. It is recommended that they are obtained prior to installation.

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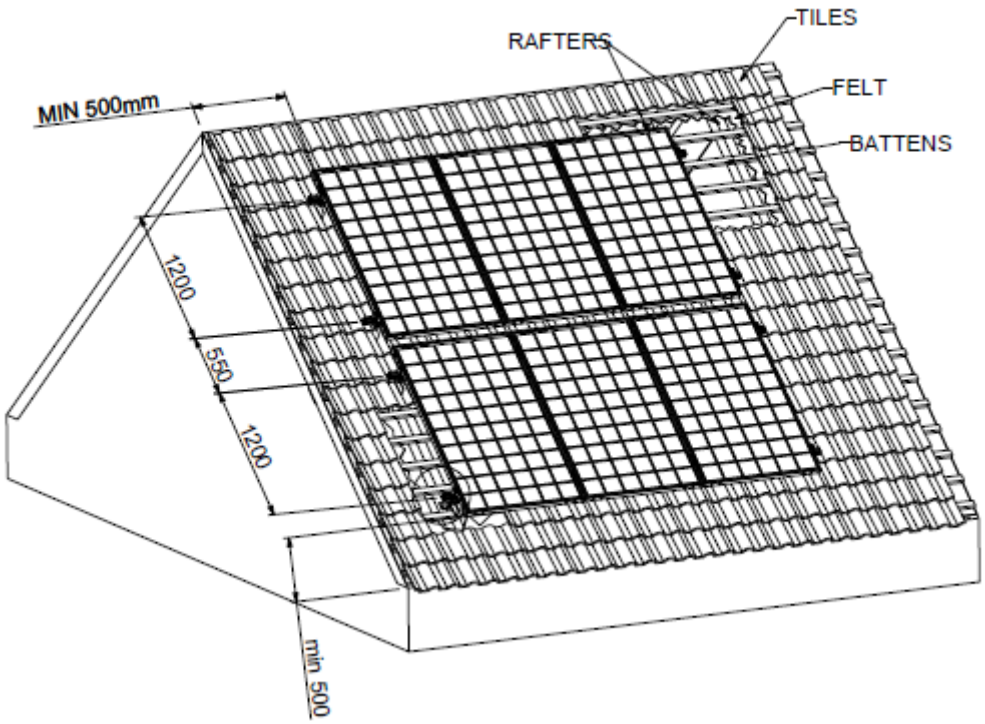
- Cordless drill
- Measuring tape
- Spanners, 13mm
- Allen Keys, torque head
- Angle Grinder With Stone Disc

5.1 PV Layout Installation

- Before commencing installation of the PV array check that all rafters, trusses in the attic and other materials are in good condition.
- Check for indication of previous water leaks.
- Properly seal any roof penetrations with roofing industry approved sealing methods.
- Measure the spacing of the rafters or trusses to confirm the dimensions and prepare for the system layout included in your kit.
- Determine the location of the electrical roof penetration and wire run.
- Ensure the roof area or other installation site is capable of handling the Dimplex system size.
- Verify that the roof is capable of handling additional weight of PV system.
- Augment roof structure as necessary.
- The wood must be in excellent condition and have sufficient width and depth to accommodate the required screws and safely withstand the loads.
- The distance to the rafter edge must be at least four times the diameter of the screw If necessary, rafters need to be widened.



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5.2 PV Array Layout:

Each row of modules is held to the roof using two aluminum rails as shown in the above picture .The PV rails are fastened to the roof using a number of roof hooks and cross connector fixtures. The cross connectors are used to fix the roof hooks to the rails.Extra care should be taken when positioning the roof kit in order to ensure that the rails are aligned correctly. The roof hooks need to be secured correctly to ensure sufficient strength and resilience to wind and snow loads. All the roof hooks included in the kit must be used. Additional roof hooks can be purchased for areas that experience high wind and snow loads. Consult GDC group for advice.

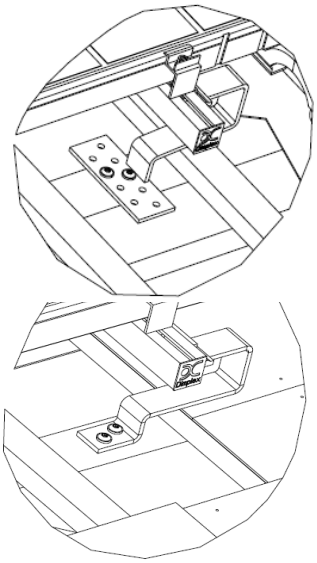
The PV array should not be installed closer than 500mm to the perimeter of the roof including ridge line and eaves.

5.3 Preparing The Roof For Installation

- Locate roof rafters. Once the rafters have been located, draw a chalk line on every tile/slate to identify their location.
- Measure up from the eave (min. 700mm) and draw a chalk line. This marks the location of the bottom rail. Note modules should not be located in shaded areas.
- Ensure one full slate or tile is exposed on all four sides of the perimeter.

5.4 Fastening The Roof Hooks:

- Remove tiles. Each roof hook (1), must be fastened with at least 2 countersunk woodscrews (2), one of which must be screwed into the top row of the bores and one in the bottom row of bores. The countersunk wood screws (2) are screwed into the wooden roof rafter without pre-drilling. If standard tools are used properly, there is no risk of over winding the screws



- When positioning the screws, it is important to ensure that the hooks of the roof hooks (1) are all in line so that the mounting rail is not under tension when mounted. The number and positioning of the roof hooks can be obtained from the roof layout contained in your kit.
- As a general rule each mounting rail needs a roof hook no more than 300mm from the end of the rail. Roof hooks should not be fixed more than 800mm apart. With rafter spacing of 600mm every rafter is sufficient.

- The dimensions of the roof hooks (1) have been chosen so that to they can be built into standard slate and plain tile configurations. The roof hooks should be positioned so that their flanges sit within the hollow part of the tile and are spaced 5mm away from the surface and face this ensures that the hook does not kick up or press down against the tile and potentialy break it when subjected to the maximum load. If necessary the roof hook must be shimmed with wood. 6mm and 9mm wooden shims can be purchased as an accessory. Replace the roof tiles or slates over the roof hook. Most tiles will require a small under channel section to be removed using an angle grinder- so as to prevent the roof hook kicking up against the tile. When correctly installed the tile or slate should lay flat and even like all other tiles/slates on the roof.

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5.5 Install Mounting Rails:

- In order to connect the mounting rails (3) with the stainless steel roof hooks (1) the cross connector (4) must be loosely bolted together with cylinder head Allen screws M8 x 25 (15) and a self-locking nut (6).
- The mounting rail (3) is held against the cross connector (4) and bolted together loosely with a cylinder head Allen screw M8 x 20 (5).
- Once all cross connectors (4) have been joined to a mounting rail (3) all component can be bolted together and tightened.

5.6 Install Flexible And Fixed Connectors:

- Depending on the size of the Dimplex photovoltaic kit after every 5.2 meters of mounting rail (3), a stiff rail connector (7) must be used.
- Attachment to the mounting rail is done with 4 cylinder head Allen screws (5) M8 x 20 per rail connector.
- After every 12 meters of mounting rail (1) a flexible rail connector (8) must be mounted.
- The flexible rail connector (8), requires no bolting and is inserted into the mounting rails (3) in order to be connected.
- Modules must NOT be mounted over a flexible rail connector (8).

5.7 Install Sliding Slot Nuts:

- The sliding slot nut component is used to connect the rail (3) and the PV modules together via the middle clamps (10) and corner clamps (11).
- Hold the slot nut (9) at a slight angle and insert into the slot of the mounting rail.
- The slot nut (9) can be slid into the desired position.

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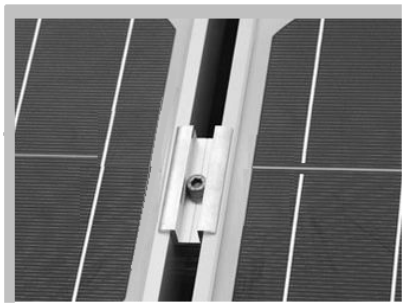
5.8 Install the Middle, Corner Clamps And Modules:

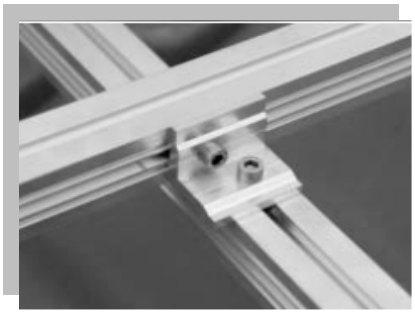
- The photovoltaic modules are mounted to the mounting rails (3) with middle clamps (10), between the PV modules and corner clamps (11) at the end of each module row.
- Middle clamps (10) and corner clamps (11) are bolted to the rails using the previously inserted slot nuts (9) and Cylinder head Allen screw M8 x 50 (12).
- There are two middle clamps (10) for each module and two corner clamps (11) for each end module .
- The module at one end of the mounting rail should be fitted first. It is important to ensure that this module is located square (using string line or mechanical square), as alignment of this module will affect the entire location of the subsequently laid modules.



- Once the first module is fitted continue laying the rest of the module row. Ensure the modules are neatly square to one another and that no gaps exist.
- Note the clamps are fixing the modules to the rail and must be securely tightened. Once all modules and clamps are in place tighten the bolts to a torque of 20Nm.

5.9 Mounting in A Cross Bracing Pattern

- The mounting pattern (single-layer system or cross braced) can be obtained from the roof configuration layout. In the case of cross braced mounting, the mounting rails (3) are combined with the cross connector (4) and cylinder head Allen screws (5), M8 x 20 into a cross bracing pattern. The positioning of the mounting rails (3) and cross connectors (4) can be obtained from the roof configuration layout. A cylinder head Allen screw (5), M8 x 20 must be placed into the slot nut (9) and another in the screw channel of the rail.

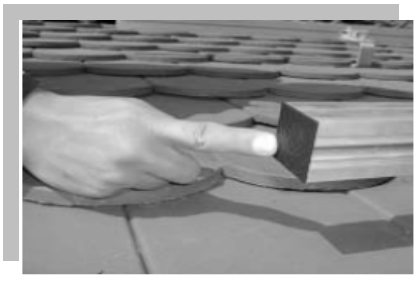


5.10 Install Dimplex End Caps

The ends of the mounting rails (3) must be covered with the end caps, (14).

Advantages:

- prevents wind noise
- prevents water from entering mounting rail



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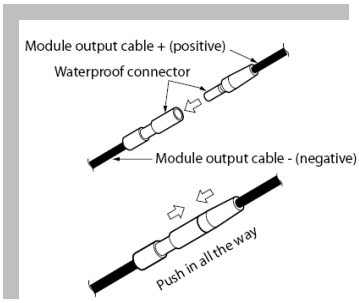
5.11 Connect Earth and D.C Cables for PV Array.



- Connect each array according to the circuit diagram supplied with the Dimplex kit. There is a cable + (positive) and a cable - (negative) on the rear side of each solar module.
- Connect the waterproof MC3 connectors on these cables in series, making sure to push the connectors all the way in. Loose connections can result in heat, burns, and other damage. Refer to the PV datasheet for further safety and installation procedures.

- On the first solar module, connect the positive cable to the negative connector on the 10 meter D.C. extension cable included in the kit. Connect the negative cable of the first module to the positive cable of the second solar module. On the second solar module, connect the negative cable to the positive cable of the third solar module. Continue until you have series connected the appropriate number of modules for the desired kit as per circuit diagram. Finally connect the negative cable of the last module in the array to the positive connector on the other 10 meter D.C. extension cable supplied in the kit.

- When you have made direct connections between the specified number of solar modules, use a digital multimeter to measure the voltage output of the array. Do this for each string, recording the measurement results to compare with the PV array voltage on the circuit diagram. This information is needed to check for solar module wiring mistakes.

- Organise the cables between solar modules. Bundle the cables so that they do not touch the roof, and use cable ties (15) provided to fasten them to the rear side of the mounting rail (3) frame. Leaves and other debris can be caught around cables that are allowed to touch the roof, and over the years loose dirt can build up, potentially causing the roof to leak.

- The D.C. extension cable should enter the roof adjacent to the roof hook. The cable should be laid under an overlap in the roof felt membrane. **Do not** create holes in the felt as this will affect the integrity of the roof structure. The cables should then be fixed securely and neatly in the attic, ready for connection to the D.C. isolator or inverter.

- Ensure that the mounting frame is properly earthed as per standard electrical earth recommendations. If a lightening arrester is present, the PV frame should be connected to it using the PV frame. The slot for mounting on the reverse side of the PV module is ideally suited for fixing a thick cable. If no arrester is present, the potential equalization can be carried out using a connection of a cable at the mounting frame. Please consult local regulations to ensure compliance.

Beware the cables are live at all times during daylight.

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Section 6. Interface PV System to Electricity Company

The inspection and testing of A.C. circuits is comprehensively covered within BS 7671 and supporting technical guides. Inspection and testing documentation typically comprises 3 forms – an installation certificate, which includes a schedule of items inspected and a schedule of test results.
The inspection and testing of D.C. circuits, particularly the testing of PV array circuits requires special considerations. This is out of the scope of this document please refer to BS 7671 and Photovoltaic's in Buildings Guide to the installation of PV systems 2nd Edition (DTI/Pub URN 06/1972) for further reading.
The section below has been supplied to assist and provide guidance to qualified electricians with the A.C. wiring of a typical PV domestic system. It describes the typical works and materials required to meet current regulations.

For project specific information – please see the project specific system schematic in the appendix.

Purpose A dedicated circuit is required to provide the A.C. electrical connection between a PV system and the mains electricity supply. Various standards and regulations apply to the design of the circuit. The following table refers to systems which have a total inverter capacity of 3.6kw.

Materials required – supplied by site electrician		Notes
Cable	Cable run 0 to 20m – 6mm^2 Cable run 20 to 30m – 10mm^2 Cable run over 30m – size on request	Depending upon cable route, armored cable or trunking may be required
MCB	16A (type C)	For older fuse boxes, a cartridge or wire fuse is an acceptable alternative
Main Isolator	Double pole rotary lockable isolator (lockable in the off position only) – 16A	Must be installed next to distribution board

6.1 Install the Generation Meter

The generation meter is supplied as part of the kit and needs to be installed in the A.C. circuit. There are no restrictions governing the siting of the generation meter but it is recommended it is located where the consumer can readily observe it, in order for the property owner to see how much electricity their PV system has produced.

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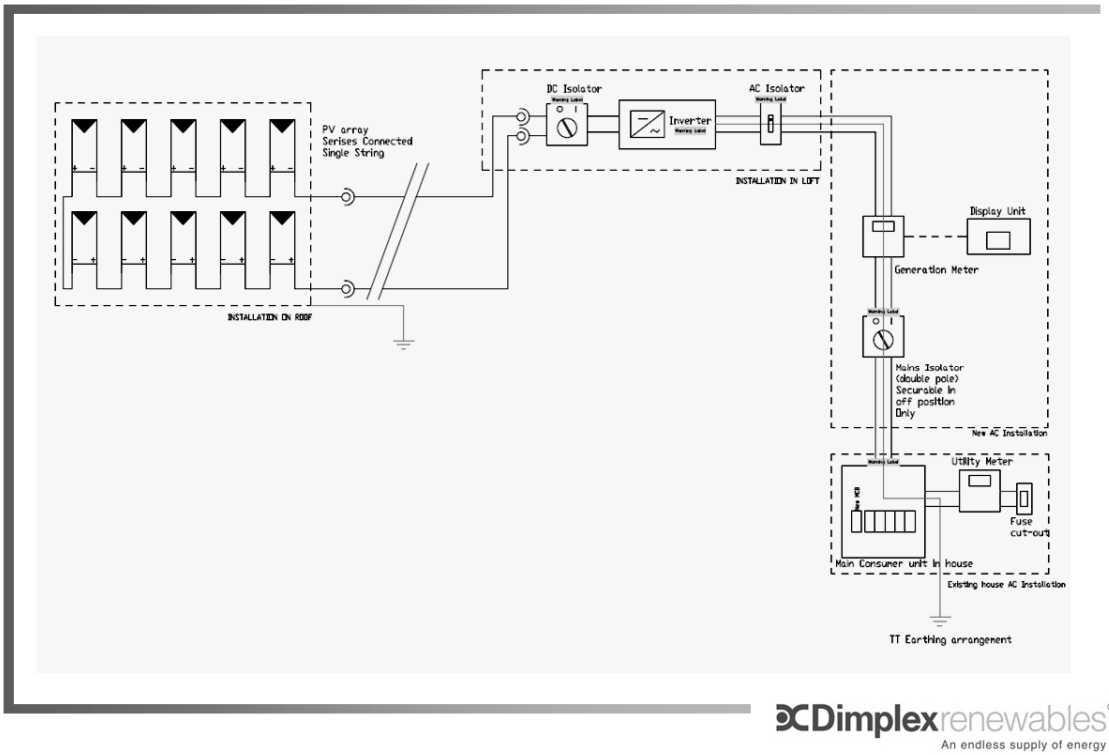

6.2 Works required by site electrician

Install a new A.C. circuit from consumer unit to site of inverter(s) as per the diagram above and as per the project specific schematic included in the kit contents. When installing the A.C. circuit make sure the following points are adhered too:

- No other loads to be on circuit.
- Mains isolator to be located adjacent to the consumer unit
- The main isolator should switch both Live and Neutral cables
- Main isolator to be wired with PV system connected to Load terminals
- Works / specifications to be as described above unless notified otherwise by Dimplex.
- Warning labels affixed to all isolators and inverters and consumer unit. These labels are included in the kit contents.

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Section 7. Testing Solar PV Installation

Full array test is out of the scope of this document. Refer to BS 7671 and Photovoltaic's in Buildings Guide to the installation of PV systems 2nd Edition (DTI/Pub URN 06/1972) for further reading.

Section 8. Commissioning, Operating and Maintenance.

System Commissioning is out of the scope of this document .Refer to BS 7671 and Photovoltaic's in Buildings Guide to the installation of PV systems 2nd Edition (DTI/Pub URN 06/1972) for further reading.

8.1 MAINTENANCE

Some maintenance is recommended to maintain optimal output performance of solar cell modules. If the module surface becomes dirty, it may cause reduction of output power. It is recommended to clean the surface with water and soft cloth or sponge. A mild non-abrasive detergent may be applied for the persistent dirt. Annual inspection is recommended for the electrical and mechanical connections. Electrical and mechanical inspection or maintenance should be carried out by an appropriately qualified professional. Refer to the manufacture's manual in relation to the maintenance of the inverter.

Section 9. Shut Down/ Start Up Procedure.

9.1 System Start Up

Refer to manufacturer's manual for the inverter and follow the start-up procedure. This generally involves turning on the PV D.C. main switch followed by the A.C. main isolator switch but the procedures recommended by the inverter manufacturer must be followed. The system connects to grid [after 60 seconds] When the A.C. main switch is turned ON- follow the inverter start-up procedure.

9.2 System Shut Down

Refer to manufacturer's manual for the inverter and follow shut-down procedure. This generally involves turning off the A.C. main isolator switch first but the procedures as recommended by the inverter manufacturer must be followed. Turn off inverter D.C. isolator, and turn off remainder D.C. isolator switch. The system is now in Shut down.

Section 10. Appendix.

- Kit Component list
- Wiring schematics for the different Dimplex kits
- Cad drawings for the different PV roof mounting systems.

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DXPV138/230/2/3 Kit Quantities

Part Number	Model Number	Description	Quantity
038715	DXPVM230P6-30	230W Poly Solar PV Panel	6
038746	DXPVAC100C	Total generation meter	1
038777	DXPVAC1	32A 690V AC surface mounted isolator (lockable)	1
038760	DXPVDC1	12A 500V 2 pole DC surface mounted isolator (lockable)	1
040299	DXPVRKHEXM820-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	1
039774	DXPVRKHEXM850-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	2
041388	DXPVRKHEXM825-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	1
041401	DXPVRKM8N1-25	Bag of 25 x Serated nut A2 DIN 6923	1
039781	DXPVRKSBM81-10	Bag of 10 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	2
039736	DXPVRKCT1	Bag of 25 x Cable Ties-UV-Resistant	2
039675	DXPVRKEC1	Bag of 4 x End Cap PP, 40x40mm	3
039699	DXPVRKMC1	Bag of 4 x MG-MK 01, Middle Clamp, blank	3
039750	DXPVRKXC1	Bag of 4 x Cross connector (74011001)	6
039682	DXPVRKCC1	Bag of 4 x Corner Clamp, blank 50mm	3
039668	DXPVRKMR3	Mounting Rail medium 40x40, L = 3.2M	4
039903 / 039729	DXPVRKPT1 / DXPVRKRHST1	Plain tile stainless steel / Slate tile stainless steel	20
041289	DXPVRKSB100-10	Bag of 10 x Seating Bolt 8x100mm galvanised	2
039811	DXPVRKSB100-25	Bag of 25 x Seating Bolt 8x100mm galvanised	1
038623 / 038999	DXPVI1200 / DXPVI2000(P)	Sunny Boy SB-1200, 1200W String Inverter / PVI-2000-OUTD	1
038784	DXPVC10\1	10 meter extension cable Male/Female MC3; 4mm2 (+) MC3 -- 10 meters 4mm2-- MC4 (-)	1
040220	DXPVC10\2	10 meter extension cable Male/Female MC3; 4mm2 (-) MC3 -- 10 meters 4mm2 -- MC4 (+)	1
040366	DXPVP052	Installation manual	1
040183	DXPVWLPK1	PV Array 19 label Pack	1

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DXPV184/230/2/4 Kit Quantities

Part Number	Model Number	Description	Quantity
038715	DXPVM230P6-30	230W Poly Solar PV Panel	8
038746	DXPVAC100C	Total generation meter	1
038777	DXPVAC1	32A 690V AC surface mounted isolator (lockable)	1
038760	DXPVDC1	12A 500V 2 pole DC surface mounted isolator (lockable)	1
039767	DXPVRKHEXM820-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	1
040299	DXPVRKHEXM820-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	1
040305	DXPVRKHEXMB50-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	1
041371	DXPVRKHEXM825-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	3
041395	DXPVRKM8N1-10	Bag of 10 x Serated nut A2 DIN 6923	3
040312	DXPVRKSBM81-25	Bag of 25 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	1
039736	DXPVRKCT1	Bag of 25 x Cable Ties-UV-Resistant	2
039675	DXPVRKEC1	Bag of 4 x End Cap PP, 40x40mm	3
039699	DXPVRKMC1	Bag of 4 x MG-MK 01, Middle Clamp, blank	4
039750	DXPVRKXC1	Bag of 4 x Cross connector (74011001)	8
039682	DXPVRKCC1	Bag of 4 x Corner Clamp, blank 50mm	3
039651	DXPVRKMR4	Mounting Rail medium 40x40 , L = 4.2M	4
038623 / 038999	DXPVRKPT1 / DXPVRKRHST1	Plain tile stainless steel / Slate tile stainless steel	28
041289	DXPVRKSB100-10	Bag of 10 x Seating Bolt 8x100mm galvanised	1
039811	DXPVRKSB100-25	Bag of 25 x Seating Bolt 8x100mm galvanised	2
038630 / 038999	DXPVI1700DX / PVI2000(P)	Sunny Boy SB-1700, 1700W String Inverter / PVI-2000-OUTD	1
038784	DXPVC10\1	10 meter extension cable Male/Female MC3; 4mm2 (+) MC3 -- 10 meters 4mm2-- MC4 (-)	1
040220	DXPVC10\2	10 meter extension cable Male/Female MC3; 4mm2 (-) MC3 -- 10 meters 4mm2 -- MC4 (+)	1
040366	DXPVP052	Installation manual	1
040183	DXPVWLPK1	PV Array 19 label Pack	1

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DXPV207/230/3/3 Kit Quantities

Part Number	Model Number	Description	Quantity
038715	DXPVM230P6-30	230W Poly Solar PV Panel	9
038746	DXPVAC100C	Total generation meter	1
038777	DXPVAC1	32A 690V AC surface mounted isolator (lockable)	1
038760	DXPVDC1	12A 500V 2 pole DC surface mounted isolator (lockable)	1
039767	DXPVRKHEXM820-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	1
040299	DXPVRKHEXM820-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	1
039774	DXPVRKHEXM850-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	3
041371	DXPVRKHEXM825-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	1
041388	DXPVRKHEXM825-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	1
041395	DXPVRKM8N1-10	Bag of 10 x Serated nut A2 DIN 6923	1
041401	DXPVRKM8N1-25	Bag of 25 x Serated nut A2 DIN 6923	1
039781	DXPVRKSBM81-10	Bag of 10 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	3
039736	DXPVRKCT1	Bag of 25 x Cable Ties-UV-Resistant	2
039675	DXPVRKEC1	Bag of 4 x End Cap PP, 40x40mm	4
039699	DXPVRKMC1	Bag of 4 xMG-MK 01, Middle Clamp, blank	4
039750	DXPVRKXC1	Bag of 4 x Cross connector (74011001)	8
039682	DXPVRKCC1	Bag of 4 x Corner Clamp, blank 50mm	4
039668	DXPVRKMR3	Mounting Rail medium 40x40, L = 3.2M	6
039903 / 039729	DXPVRKPT1/ DXPVRKRHST1	Plain tile stainless steel / Slate tile Stainless steel	30
041289	DXPVRKSB100-10	Bag of 10 x Seating Bolt 8x100mm galvanised	2
039811	DXPVRKSB100-25	Bag of 25 x Seating Bolt 8x100mm galvanised	2
039064 / 038999	DXPVI2000 / DXPVI2000(P)	Sunny Boy SB-2000-HF / PVI-2000-OUTD	1
038784	DXPVC10\1	10 meter extension cable Male/Female MC3; 4mm2 (+) MC3 -- 10 meters 4mm2-- MC4 (-)	1
040220	DXPVC10\2	10 meter extension cable Male/Female MC3; 4mm2 (-) MC3 -- 10 meters 4mm2 -- MC4 (+)	1
040366	DXPVP052	Installation manual	1
040183	DXPVWLPK1	PV Array 19 label Pack	1

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DXPV230/230/2/5 Kit Quantities

Part Number	Model Number	Description	Quantity
038715	DXPVM230P6-30	230W Poly Solar PV Panel	10
038746	DXPVAC100C	Total generation meter	1
038777	DXPVAC1	32A 690V AC surface mounted isolator (lockable)	1
038760	DXPVDC1	12A 500V 2 pole DC surface mounted isolator (lockable)	1
039767	DXPVRKHEXM820-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	2
040299	DXPVRKHEXM820-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	1
039774	DXPVRKHEXM850-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	3
041371	DXPVRKHEXM825-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	4
041395	DXPVRKM8N1-10	Bag of 10 x Serated nut A2 DIN 6923	4
039781	DXPVRKSBM81-10	Bag of 10 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	3
039736	DXPVRKCT1	Bag of 25 x Cable Ties-UV-Resistant	3
039675	DXPVRKEC1	Bag of 4 x End Cap PP, 40x40mm	3
039699	DXPVRKMC1	Bag of 4 xMG-MK 01, Middle Clamp, blank	5
039750	DXPVRKXC1	Bag of 4 x Cross connector (74011001)	10
039682	DXPVRKCC1	Bag of 4 x Corner Clamp, blank 50mm	3
039644	DXPVRKMR5	Mounting Rail medium 40x40 , L = 5.2M	4
039903 / 039729	DXPVRKPT1 / DXPVRKRHST1	Plain tile stainless steel / Slate tile stainless steel	36
039811	DXPVRKSB100-25	Bag of 25 x Seating Bolt 8x100mm galvanised	3
039606 / 038999	DXPVI2500SB / DXPVI2000(P)	Sunny Boy SB-2500, 2500W String Inverter / PVI-2000-OUTD	1
038784	DXPVC10\1	10 meter extension cable Male/Female MC3; 4mm2 (+) MC3 -- 10 meters 4mm2-- MC4 (-)	1
040220	DXPVC10\2	10 meter extension cable Male/Female MC3; 4mm2 (-) MC3 -- 10 meters 4mm2 -- MC4 (+)	1
040366	DXPVP052	Installation manual	1
040183	DXPVWLPK1	PV Array 19 label Pack	1

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DXPV276/230/2/6 Kit Quantities

Part Number	Model Number	Description	Quantity
038715	DXPVM230P6-30	230W Poly Solar PV Panel	12
038746	DXPVAC100C	Total generation meter	1
038777	DXPVAC1	32A 690V AC surface mounted isolator (lockable)	1
038760 / 041265	DXPVDC1 / DXPVDC2	12A 500V 2 pole DC surface mounted isolator / 12A 320V 4 pole DC surface mounted isolator	1
040299	DXPVRKHEXM820-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	2
039774	DXPVRKHEXM850-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	1
040305	DXPVRKHEXMB50-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	1
041371	DXPVRKHEXM825-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	2
041388	DXPVRKHEXM825-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	1
041395	DXPVRKM8N1-10	Bag of 10 x Serated nut A2 DIN 6923	2
041401	DXPVRKM8N1-25	Bag of 25 x Serated nut A2 DIN 6923	1
039781	DXPVRKSBM81-10	Bag of 10 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	1
040312	DXPVRKSBM81-25	Bag of 25 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	1
039736	DXPVRKCT1	Bag of 25 x Cable Ties-UV-Resistant	3
039675	DXPVRKEC1	Bag of 4 x End Cap PP, 40x40mm	3
039699	DXPVRKMC1	Bag of 4 xMG-MK 01, Middle Clamp, blank	6
039750	DXPVRKXC1	Bag of 4 x Cross connector (74011001)	11
039682	DXPVRKCC1	Bag of 4 x Corner Clamp, blank 50mm	3
039668	DXPVRKMR3	Mounting Rail medium 40x40, L = 3.2M	8
039903 / 039729	DXPVRKPT1 / DXPVRKRHST1	Plain tile stainless steel / Slate tile stainless steel	40
041289	DXPVRKSB100-10	Bag of 10 x Seating Bolt 8x100mm galvanised	1
039811	DXPVRKSB100-25	Bag of 25 x Seating Bolt 8x100mm galvanised	3
039743	DXPVRKRC1	Rail Connector Fixed	4
039606 / 039002	DXPVI2500SB / DXPV13000(P)	Sunny Boy SB-2500, 2500W String Inverter / PVI-3.0-OUTD	1
038784	DXPVC10\1	10 meter extension cable Male/Female MC3; 4mm2 (+) MC3 -- 10 meters 4mm2-- MC4 (-)	2
040220	DXPVC10\2	10 meter extension cable Male/Female MC3; 4mm2 (-) MC3 -- 10 meters 4mm2 -- MC4 (+)	2
040366	DXPVP052	Installation manual	1
040183	DXPVWLPK1	PV Array 19 label Pack	1

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DXPV276/230/3/4 Kit Quantities

Part Number	Model Number	Description	Quantity
038715	DXPVM230P6-30	230W Poly Solar PV Panel	12
038746	DXPVAC100C	Total generation meter	1
038777	DXPVAC1	32A 690V AC surface mounted isolator (lockable)	1
038760 / 041265	DXPVDC1 / DXPVDC2	12A 500V 2 pole DC surface mounted isolator / 12A 320V 4 pole DC surface mounted isolator	1
038760	DXPVDC1	12A 500V 2 pole DC surface mounted isolator (lockable)	1
039767	DXPVRKHEXM820-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	2
040299	DXPVRKHEXM820-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	1
039774	DXPVRKHEXM850-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	1
040305	DXPVRKHEXMB50-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	1
041371	DXPVRKHEXM825-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	2
041388	DXPVRKHEXM825-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	1
041395	DXPVRKM8N1-10	Bag of 10 x Serated nut A2 DIN 6923	2
041401	DXPVRKM8N1-25	Bag of 25 x Serated nut A2 DIN 6923	1
039781	DXPVRKSBM81-10	Bag of 10 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	1
040312	DXPVRKSBM81-25	Bag of 25 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	1
039736	DXPVRKCT1	Bag of 25 x Cable Ties-UV-Resistant	3
039675	DXPVRKEC1	Bag of 4 x End Cap PP, 40x40mm	4
039699	DXPVRKMC1	Bag of 4 xMG-MK 01, Middle Clamp, blank	5
039750	DXPVRKXC1	Bag of 4 x Cross connector (74011001)	12
039682	DXPVRKCC1	Bag of 4 x Corner Clamp, blank 50mm	4
039651	DXPVRKMR4	Mounting Rail medium 40x40 , L = 4.2M	6
039903 / 039729	DXPVRKPT1 / DXPVRKRHST1	Plain tile stainless steel / Slate tile stainless steel	42
041289	DXPVRKSB100-10	Bag of 10 x Seating Bolt 8x100mm galvanised	4
039811	DXPVRKSB100-25	Bag of 25 x Seating Bolt 8x100mm galvanised	2
039606 / 039002	DXPVI2500SB / DXPV13000(P)	Sunny Boy SB-2500, 2500W String Inverter / PVI-3.0-OUTD	1
038784	DXPVC10\1	10 meter extension cable Male/Female MC3; 4mm2 (+) MC3 -- 10 meters 4mm2-- MC4 (-)	2
040220	DXPVC10\2	10 meter extension cable Male/Female MC3; 4mm2 (-) MC3 -- 10 meters 4mm2 -- MC4 (+)	2
040366	DXPVP052	Installation manual	1
040183	DXPVWLPK1	PV Array 19 label Pack	1

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DXPV276/230/3/4 Kit Quantities

Part Number	Model Number	Description	Quantity
038715	DXPVM230P6-30	230W Poly Solar PV Panel	12
038746	DXPVAC100C	Total generation meter	1
038777	DXPVAC1	32A 690V AC surface mounted isolator (lockable)	1
038760 / 041265	DXPVDC1 / DXPVDC2	12A 500V 2 pole DC surface mounted isolator / 12A 320V 4 pole DC surface mounted isolator	1
038760	DXPVDC1	12A 500V 2 pole DC surface mounted isolator (lockable)	0
039767	DXPVRKHEXM820-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	2
040299	DXPVRKHEXM820-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	1
039774	DXPVRKHEXM850-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	1
040305	DXPVRKHEXMB50-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	1
041371	DXPVRKHEXM825-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	2
041388	DXPVRKHEXM825-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	1
041395	DXPVRKM8N1-10	Bag of 10 x Serated nut A2 DIN 6923	2
041401	DXPVRKM8N1-25	Bag of 25 x Serated nut A2 DIN 6923	1
039781	DXPVRKSBM81-10	Bag of 10 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	1
040312	DXPVRKSBM81-25	Bag of 25 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	1
039736	DXPVRKCT1	Bag of 25 x Cable Ties-UV-Resistant	3
039675	DXPVRKEC1	Bag of 4 x End Cap PP, 40x40mm	5
039699	DXPVRKMC1	Bag of 4 xMG-MK 01, Middle Clamp, blank	5
039750	DXPVRKXC1	Bag of 4 x Cross connector (74011001)	11
039682	DXPVRKCC1	Bag of 4 x Corner Clamp, blank 50mm	5
039668	DXPVRKMR3	Mounting Rail medium 40x40, L = 3.2M	8
039903 / 039729	DXPVRKPT1 / DXPVRKRHST1	Plain tile stainless steel / Slate tile stainless steel	40
041289	DXPVRKSB100-10	Bag of 10 x Seating Bolt 8x100mm galvanised	1
039811	DXPVRKSB100-25	Bag of 25 x Seating Bolt 8x100mm galvanised	3
039606 / 039002	DXPVI2500SB / DXPV13000(P)	Sunny Boy SB-2500, 2500W String Inverter / PVI-3.0-OUTD	1
038784	DXPVC10\1	10 meter extension cable Male/Female MC3; 4mm2 (+) MC3 -- 10 meters 4mm2-- MC4 (-)	2
040220	DXPVC10\2	10 meter extension cable Male/Female MC3; 4mm2 (-) MC3 -- 10 meters 4mm2 -- MC4 (+)	2
040366	DXPVP052	Installation manual	1
040183	DXPVWLPK1	PV Array 19 label Pack	1

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DXPV345/230/3/5 Kit Quantities

Part Number	Model Number	Description	Quantity
038715	DXPVM230P6-30	230W Poly Solar PV Panel	15
038746	DXPVAC100C	Total generation meter	1
038777	DXPVAC1	32A 690V AC surface mounted isolator (lockable)	1
041265	DXPVDC2	12A 340V 4 pole DC surface mounted isolator (lockable)	1
039767	DXPVRKHEXM820-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	1
040299	DXPVRKHEXM820-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	2
039774	DXPVRKHEXM850-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	2
040305	DXPVRKHEXMB50-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	1
041371	DXPVRKHEXM825-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	1
041388	DXPVRKHEXM825-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	2
041395	DXPVRKM8N1-10	Bag of 10 x Serated nut A2 DIN 6923	1
041401	DXPVRKM8N1-25	Bag of 25 x Serated nut A2 DIN 6923	2
039781	DXPVRKSBM81-10	Bag of 10 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	2
040312	DXPVRKSBM81-25	Bag of 25 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	1
039736	DXPVRKCT1	Bag of 25 x Cable Ties-UV-Resistant	4
039675	DXPVRKEC1	Bag of 4 x End Cap PP, 40x40mm	4
039699	DXPVRKMC1	Bag of 4 xMG-MK 01, Middle Clamp, blank	7
039750	DXPVRKXC1	Bag of 4 x Cross connector (74011001)	15
039682	DXPVRKCC1	Bag of 4 x Corner Clamp, blank 50mm	4
039644	DXPVRKMR5	Mounting Rail medium 40x40 , L = 5.2M	6
039903 / 039729	DXPVRKPT1 / DXPVRKRHST1	Plain tile stainless steel / Slate tile stainless steel	54
041289	DXPVRKSB100-10	Bag of 10 x Seating Bolt 8x100mm galvanised	4
039811	DXPVRKSB100-25	Bag of 25 x Seating Bolt 8x100mm galvanised	3
039071 / 039019	DXPVI3000/ DXPVI3600(P)	Sunny Boy SB-3000-HF / PVI-3.6-OUTD	1
038784	DXPVC10\1	10 meter extension cable Male/Female MC3; 4mm2 (+) MC3 -- 10 meters 4mm2-- MC4 (-)	2
040220	DXPVC10\2	10 meter extension cable Male/Female MC3; 4mm2 (-) MC3 -- 10 meters 4mm2 -- MC4 (+)	2
040366	DXPVP052	Installation manual	1
040183	DXPVWLPK1	PV Array 19 label Pack	1

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DXPV368/230/2/8 Kit Quantities

Part Number	Model Number	Description	Quantity
038715	DXPVM230P6-30	230W Poly Solar PV Panel	16
038746	DXPVAC100C	Total generation meter	1
038777	DXPVAC1	32A 690V AC surface mounted isolator (lockable)	1
041265	DXPVDC2	12A 340V 4 pole DC surface mounted isolator (lockable)	1
040299	DXPVRKHEXM820-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	3
039774	DXPVRKHEXM850-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	2
040305	DXPVRKHEXMB50-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	1
041371	DXPVRKHEXM825-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	1
041388	DXPVRKHEXM825-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	2
041395	DXPVRKM8N1-10	Bag of 10 x Serated nut A2 DIN 6923	1
041401	DXPVRKM8N1-25	Bag of 25 x Serated nut A2 DIN 6923	2
039781	DXPVRKSBM81-10	Bag of 10 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	2
040312	DXPVRKSBM81-25	Bag of 25 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	1
039736	DXPVRKCT1	Bag of 25 x Cable Ties-UV-Resistant	4
039675	DXPVRKEC1	Bag of 4 x End Cap PP, 40x40mm	5
039699	DXPVRKMC1	Bag of 4 xMG-MK 01, Middle Clamp, blank	8
039750	DXPVRKXC1	Bag of 4 x Cross connector (74011001)	15
039682	DXPVRKCC1	Bag of 4 x Corner Clamp, blank 50mm	3
039651	DXPVRKMR4	Mounting Rail medium 40x40 , L = 4.2M	8
039903 / 039729	DXPVRKPT1 / DXPVRKRHST1	Plain tile stainless steel / Slate tile stainless steel	56
041289	DXPVRKSB100-10	Bag of 10 x Seating Bolt 8x100mm galvanised	2
039811	DXPVRKSB100-25	Bag of 25 x Seating Bolt 8x100mm galvanised	4
039743	DXPVRKRC1	Rail Connector Fixed	4
039019	DXPVI3600(P)	PVI-3.6-OUTD	1
038784	DXPVC10\1	10 meter extension cable Male/Female MC3; 4mm2 (+) MC3 -- 10 meters 4mm2-- MC4 (-)	2
040220	DXPVC10\2	10 meter extension cable Male/Female MC3; 4mm2 (-) MC3 -- 10 meters 4mm2 -- MC4 (+)	2
040366	DXPVP052	Installation manual	1
040183	DXPVWLPK1	PV Array 19 label Pack	1

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DXPV368/230/4/4 Kit Quantities

Part Number	Model Number	Description	Quantity
038715	DXPVM230P6-30	230W Poly Solar PV Panel	16
038746	DXPVAC100C	Total generation meter	1
038777	DXPVAC1	32A 690V AC surface mounted isolator (lockable)	1
041265	DXPVDC2	12A 340V 4 pole DC surface mounted isolator (lockable)	1
039767	DXPVRKHEXM820-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	1
040299	DXPVRKHEXM820-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	2
039774	DXPVRKHEXM850-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	2
040305	DXPVRKHEXMB50-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	1
041371	DXPVRKHEXM825-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	1
041388	DXPVRKHEXM825-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	2
041395	DXPVRKM8N1-10	Bag of 10 x Serated nut A2 DIN 6923	1
041401	DXPVRKM8N1-25	Bag of 25 x Serated nut A2 DIN 6923	2
039781	DXPVRKSBM81-10	Bag of 10 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	2
040312	DXPVRKSBM81-25	Bag of 25 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	1
039736	DXPVRKCT1	Bag of 25 x Cable Ties-UV-Resistant	4
039675	DXPVRKEC1	Bag of 4 x End Cap PP, 40x40mm	5
039699	DXPVRKMC1	Bag of 4 xMG-MK 01, Middle Clamp, blank	7
039750	DXPVRKXC1	Bag of 4 x Cross connector (74011001)	15
039682	DXPVRKCC1	Bag of 4 x Corner Clamp, blank 50mm	5
039651	DXPVRKMR4	Mounting Rail medium 40x40 , L = 4.2M	8
039903 / 039729	DXPVRKPT1 / DXPVRKRHST1	Plain tile stainless steel / Slate tile stainless steel	56
041289	DXPVRKSB100-10	Bag of 10 x Seating Bolt 8x100mm galvanised	2
039811	DXPVRKSB100-25	Bag of 25 x Seating Bolt 8x100mm galvanised	4
039019	DXPVI3600(P)	PVI-3.6-OUTD	1
038784	DXPVC10\1	10 meter extension cable Male/Female MC3; 4mm2 (+) MC3 -- 10 meters 4mm2-- MC4 (-)	2
040220	DXPVC10\2	10 meter extension cable Male/Female MC3; 4mm2 (-) MC3 -- 10 meters 4mm2 -- MC4 (+)	2
040366	DXPVP052	Installation manual	1
040183	DXPVWLPK1	PV Array 19 label Pack	1

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DXPV414/230/3/6 Kit Quantities

Part Number	Model Number	Description	Quantity
038715	DXPVM230P6-30	230W Poly Solar PV Panel	18
038746	DXPVAC100C	Total generation meter	1
038777	DXPVAC1	32A 690V AC surface mounted isolator (lockable)	1
041272	DXPVDC3	12A 500V 4 pole DC surface mounted isolator (lockable)	1
039767	DXPVRKHEXM820-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	2
040299	DXPVRKHEXM820-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	2
039774	DXPVRKHEXM850-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	2
040305	DXPVRKHEXMB50-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	1
041371	DXPVRKHEXM825-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	2
041388	DXPVRKHEXM825-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	2
041395	DXPVRKM8N1-10	Bag of 10 x Serated nut A2 DIN 6923	2
041401	DXPVRKM8N1-25	Bag of 25 x Serated nut A2 DIN 6923	2
039781	DXPVRKSBM81-10	Bag of 10 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	2
040312	DXPVRKSBM81-25	Bag of 25 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	1
039736	DXPVRKCT1	Bag of 25 x Cable Ties-UV-Resistant	4
039675	DXPVRKEC1	Bag of 4 x End Cap PP, 40x40mm	4
039699	DXPVRKMC1	Bag of 4 x MG-MK 01, Middle Clamp, blank	8
039750	DXPVRKXC1	Bag of 4 x Cross connector (74011001)	16
039682	DXPVRKCC1	Bag of 4 x Corner Clamp, blank 50mm	4
039668	DXPVRKMR3	Mounting Rail medium 40x40, L = 3.2M	12
039903 / 039729	DXPVRKPT1 / DXPVRKRHST1	Plain tile stainless steel / Slate tile stainless steel	60
039811	DXPVRKSB100-25	Bag of 25 x Seating Bolt 8x100mm galvanised	5
039743	DXPVRKRC1	Rail Connector Fixed	6
038661 / 039019	DXPVI3800 / DXPVI3600(P)	Sunny Boy SB-3800, 3800W String Inverter / PVI-3.6-OUTD	1
038784	DXPVC10\1	10 meter extension cable Male/Female MC3; 4mm2 (+) MC3 -- 10 meters 4mm2-- MC4 (-)	2
040220	DXPVC10\2	10 meter extension cable Male/Female MC3; 4mm2 (-) MC3 -- 10 meters 4mm2 -- MC4 (+)	2
040366	DXPVP052	Installation manual	1
040183	DXPVWLPK1	PV Array 19 label Pack	1

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DXPV460/230/2/10 Kit Quantities

Part Number	Model Number	Description	Quantity
038715	DXPVM230P6-30	230W Poly Solar PV Panel	20
038746	DXPVAC100C	Total generation meter	1
038777	DXPVAC1	32A 690V AC surface mounted isolator (lockable)	1
041272	DXPVDC3	12A 500V 4 pole DC surface mounted isolator (lockable)	1
040299	DXPVRKHEXM820-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	3
039774	DXPVRKHEXM850-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	3
040305	DXPVRKHEXMB50-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	1
041388	DXPVRKHEXM825-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	3
041401	DXPVRKM8N1-25	Bag of 25 x Serated nut A2 DIN 6923	3
039781	DXPVRKSBM81-10	Bag of 10 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	3
040312	DXPVRKSBM81-25	Bag of 25 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	1
039736	DXPVRKCT1	Bag of 25 x Cable Ties-UV-Resistant	5
039675	DXPVRKEC1	Bag of 4 x End Cap PP, 40x40mm	3
039699	DXPVRKMC1	Bag of 4 xMG-MK 01, Middle Clamp, blank	10
039750	DXPVRKXC1	Bag of 4 x Cross connector (74011001)	19
039682	DXPVRKCC1	Bag of 4 x Corner Clamp, blank 50mm	3
039644	DXPVRKMR5	Mounting Rail medium 40x40 , L = 5.2M	8
039903 / 039729	DXPVRKPT1 / DXPVRKRHST1	Plain tile stainless steel / Slate tile stainless steel	72
039811	DXPVRKSB100-25	Bag of 25 x Seating Bolt 8x100mm galvanised	6
039743	DXPVRKRC1	Rail Connector Fixed	4
039088 / 039026	DXPV14000 / DXPVI4200(P)	Sunny Boy SB-4000 TL-20, 4000W String Inverter / PVI-4.2-OUTD	1
038784	DXPVC10\1	10 meter extension cable Male/Female MC3; 4mm2 (+) MC3 -- 10 meters 4mm2-- MC4 (-)	2
040220	DXPVC10\2	10 meter extension cable Male/Female MC3; 4mm2 (-) MC3 -- 10 meters 4mm2 -- MC4 (+)	2
040366	DXPVP052	Installation manual	1
040183	DXPVWLPK1	PV Array 19 label Pack	1

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DXPV460/230/4/5 Kit Quantities

Part Number	Model Number	Description	Quantity
038715	DXPVM230P6-30	230W Poly Solar PV Panel	20
038746	DXPVAC100C	Total generation meter	1
038777	DXPVAC1	32A 690V AC surface mounted isolator (lockable)	1
041272	DXPVDC3	12A 500V 4 pole DC surface mounted isolator (lockable)	1
040299	DXPVRKHEXM820-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	3
040305	DXPVRKHEXMB50-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	2
041388	DXPVRKHEXM825-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	3
041401	DXPVRKM8N1-25	Bag of 25 x Serated nut A2 DIN 6923	3
040312	DXPVRKSBM81-25	Bag of 25 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	2
039736	DXPVRKCT1	Bag of 25 x Cable Ties-UV-Resistant	5
039675	DXPVRKEC1	Bag of 4 x End Cap PP, 40x40mm	5
039699	DXPVRKMC1	Bag of 4 x MG-MK 01, Middle Clamp, blank	9
039750	DXPVRKXC1	Bag of 4 x Cross connector (74011001)	19
039682	DXPVRKCC1	Bag of 4 x Corner Clamp, blank 50mm	5
039644	DXPVRKMR5	Mounting Rail medium 40x40 , L = 5.2M	8
039903 / 039729	DXPVRKPT1 / DXPVRKRHST1	Plain tile stainless steel / Slate tile stainless steel	72
039811	DXPVRKSB100-25	Bag of 25 x Seating Bolt 8x100mm galvanised	6
039088 / 039026	DXPV14000 / DXPVI4200(P)	Sunny Boy SB-4000 TL-20, 4000W String Inverter / PVI-4.2-OUTD	1
038784	DXPVC10\1	10 meter extension cable Male/Female MC3; 4mm2 (+) MC3 -- 10 meters 4mm2-- MC4 (-)	2
040220	DXPVC10\2	10 meter extension cable Male/Female MC3; 4mm2 (-) MC3 -- 10 meters 4mm2 -- MC4 (+)	2
040366	DXPVP052	Installation manual	1
040183	DXPVWLPK1	PV Array 19 label Pack	1

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DXPV552/230/4/6 Kit Quantities

Part Number	Model Number	Description	Quantity
038715	DXPVM230P6-30	230W Poly Solar PV Panel	24
038746	DXPVAC100C	Total generation meter	1
038777	DXPVAC1	32A 690V AC surface mounted isolator (lockable)	1
041272	DXPVDC3	12A 500V 4 pole DC surface mounted isolator (lockable)	1
040299	DXPVRKHEXM820-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x20	4
039774	DXPVRKHEXM850-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	1
040305	DXPVRKHEXMB50-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x50	2
041371	DXPVRKHEXM825-10	Bag of 10 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	1
041388	DXPVRKHEXM825-25	Bag of 25 x Cylinder Head Screw with Hexagon Socket DIN 912 A2 M8x25	3
041395	DXPVRKM8N1-10	Bag of 10 x Serated nut A2 DIN 6923	1
041401	DXPVRKM8N1-25	**B**ag of 25 x Serated nut A2 DIN 6923	3
039781	DXPVRKSBM81-10	Bag of 10 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	1
040312	DXPVRKSBM81-25	Bag of 25 x Sliding Block 13x10mm, Pivotable, Aluminium, M8, 1=22mm	2
039736	DXPVRKCT1	Bag of 25 x Cable Ties-UV-Resistant	6
039675	DXPVRKEC1	Bag of 4 x End Cap PP, 40x40mm	5
039699	DXPVRKMC1	Bag of 4 xMG-MK 01, Middle Clamp, blank	11
039750	DXPVRKXC1	Bag of 4 x Cross connector (74011001)	21
039682	DXPVRKCC1	Bag of 4 x Corner Clamp, blank 50mm	5
039668	DXPVRKMR3	Mounting Rail medium 40x40, L = 3.2M	16
039903 / 039729	DXPVRKPT1 / DXPRKRHST1	Plain tile stainless steel / Slate tile stainless steel	80
041289	DXPVRKSB100-10	Bag of 10 x Seating Bolt 8x100mm galvanised	4
039811	DXPVRKSB100-25	Bag of 25 x Seating Bolt 8x100mm galvanised	5
039743	DXPVRKRC1	Rail Connector Fixed	8
038678 / 039026	DXPVI5000 / DXPVI4200(P)	Sunny Boy SB-5000 TL-20, 5000W String Inverter / PVI-4.2-OUTD	1
038784	DXPVC10\1	10 meter extension cable Male/Female MC3; 4mm2 (+) MC3 -- 10 meters 4mm2-- MC4 (-)	2
040220	DXPVC10\2	10 meter extension cable Male/Female MC3; 4mm2 (-) MC3 -- 10 meters 4mm2 -- MC4 (+)	2
040366	DXPVP052	Installation manual	1
040183	DXPVWLPK1	PV Array 19 label Pack	1

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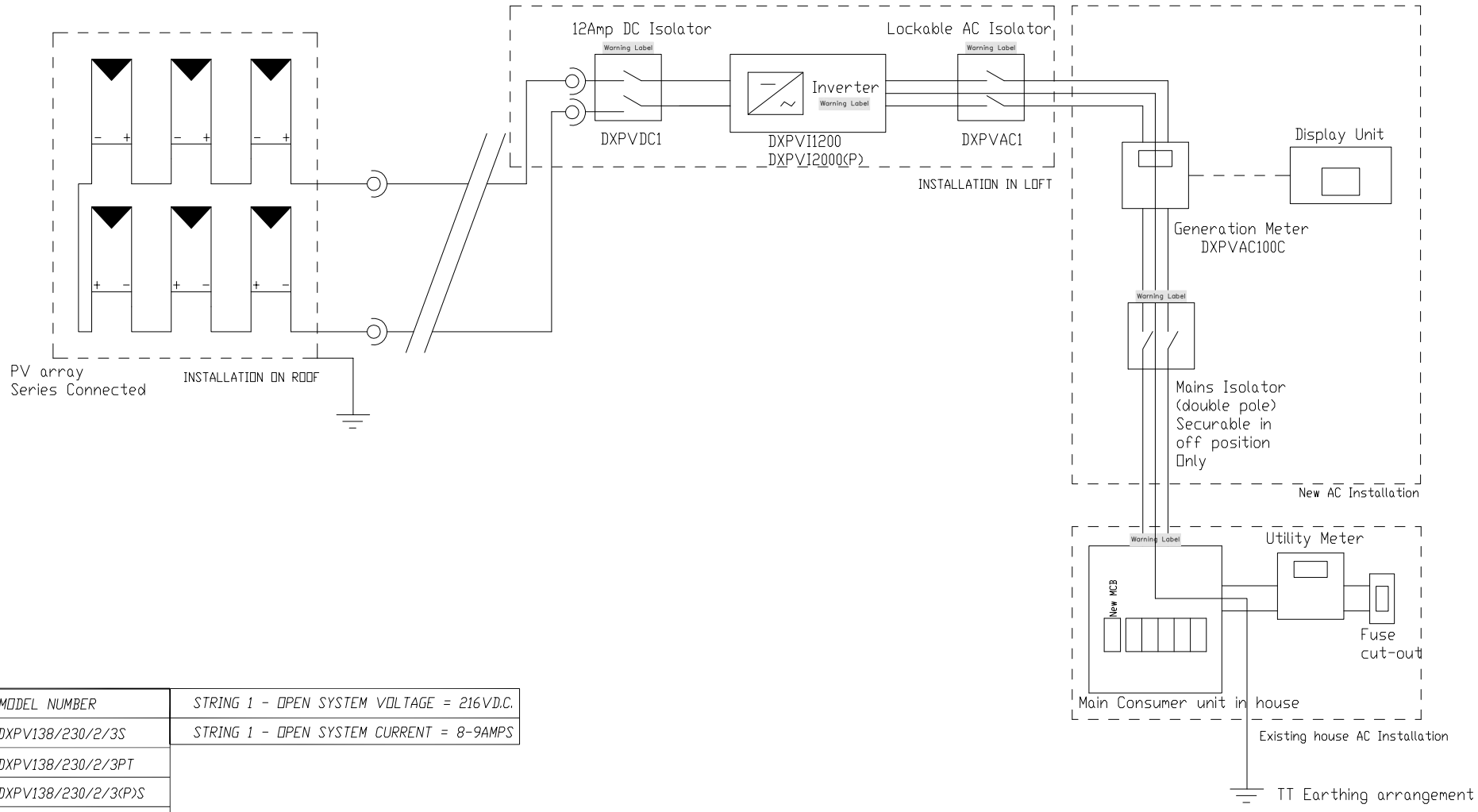

ITEM CODE	KIT REF	MODEL NUMBER
040527	15S	DXPV138/230/2/3S
040381	15PT	DXPV138/230/2/3PT
040787	15PS	DXPV138/230/2/3(P)S
040664	15PPT	DXPV138/230/2/3(P)PT

STRING 1 - OPEN SYSTEM VOLTAGE = 216V.D.C.

STRING 1 - OPEN SYSTEM CURRENT = 8-9AMPS

SHUT DOWN & START UP PROCEDURE:

IF ANY PART OF THE PV CIRCUIT OR CIRCUITS FED FROM THE CONSUMER UNIT REQUIRES WORK TO BE CARRIED OUT, THE FOLLOWING PROCEDURES SHOULD BE USED.

FOR SHUT DOWN: 1. SWITCH THE RED/YELLOW ROTARY ISOLATOR ADJACENT TO THE CONSUMER UNIT TO THE 'OFF' POSITION 2. SECURE THE SWITCH IN THE OFF POSITION WITH SUITABLE PADLOCK 3. TURN OFF THE D.C. ISOLATOR

FOR START UP: 1. REVERSE PROCEDURE APPLIES 2. REMOVE THE PADLOCK ON THE ISOLATOR ADJACENT TO THE CONSUMER UNIT AND PLACE SWITCH IN THE 'ON' POSITION 3. TURN ON THE D.C. ISOLATOR

ISSUE	MODIFICATIONS	APPD	DATE
A	RELEASE FOR APPROVAL	AJG	28/06/10
1	RELEASE FOR PRODUCTION	AJG	28/06/10
2	RELEASE FOR PRODUCTION	AJG	07/10/10

NOTES

Dimplex renewables
An endless supply of energy
GDC Group LTD., Millbrook House, Grange Drive, Hedge End, Southampton, Hants, SO302DF, UK. Tel: 08456015111

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PROJECT: Photovoltaic Generator Installation

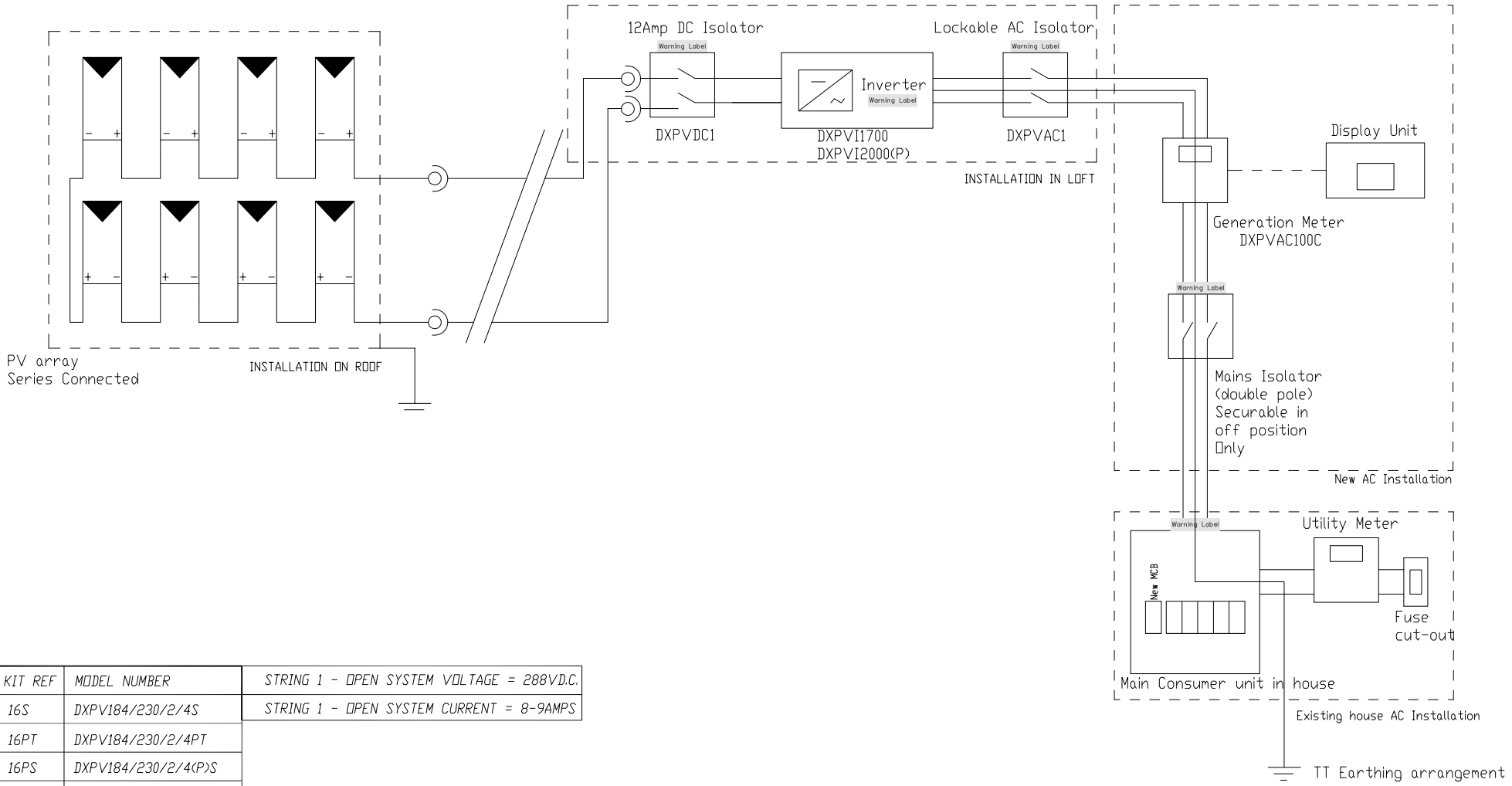
TITLE: DXPV138/230/2/3 - Output 1.38kW

NO. OFF:

DRG NO: 0/11684/0

A3

Sht 1 of 1



ITEM CODE	KIT REF	MODEL NUMBER	STRING 1 - OPEN SYSTEM VOLTAGE = 288VD.C.
040534	16S	DXPV184/230/2/4S	STRING 1 - OPEN SYSTEM CURRENT = 8-9AMPS
040398	16PT	DXPV184/230/2/4PT	
040794	16PS	DXPV184/230/2/4(P)S	
040671	16PPT	DXPV184/230/2/4(P)PT	

SHUT DOWN & START UP PROCEDURE:
IF ANY PART OF THE PV CIRCUIT OR CIRCUITS FED FROM THE CONSUMER UNIT REQUIRES WORK TO BE CARRIED OUT, THE FOLLOWING PROCEDURES SHOULD BE USED.
FOR SHUT DOWN: 1. SWITCH THE RED/YELLOW ROTARY ISOLATOR ADJACENT TO THE CONSUMER UNIT TO THE 'OFF' POSITION 2. SECURE THE SWITCH IN THE OFF POSITION WITH SUITABLE PADLOCK 3. TURN OFF THE D.C. ISOLATOR
FOR START UP: 1. REVERSE PROCEDURE APPLIES 2. REMOVE THE PADLOCK ON THE ISOLATOR ADJACENT TO THE CONSUMER UNIT AND PLACE SWITCH IN THE 'ON' POSITION 3. TURN ON THE D.C. ISOLATOR

ISSUE	MODIFICATIONS	APPD	DATE
A	RELEASE FOR APPROVAL	AJG	28/06/10
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NOTES

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PROJECT: Photovoltaic Generator Installation

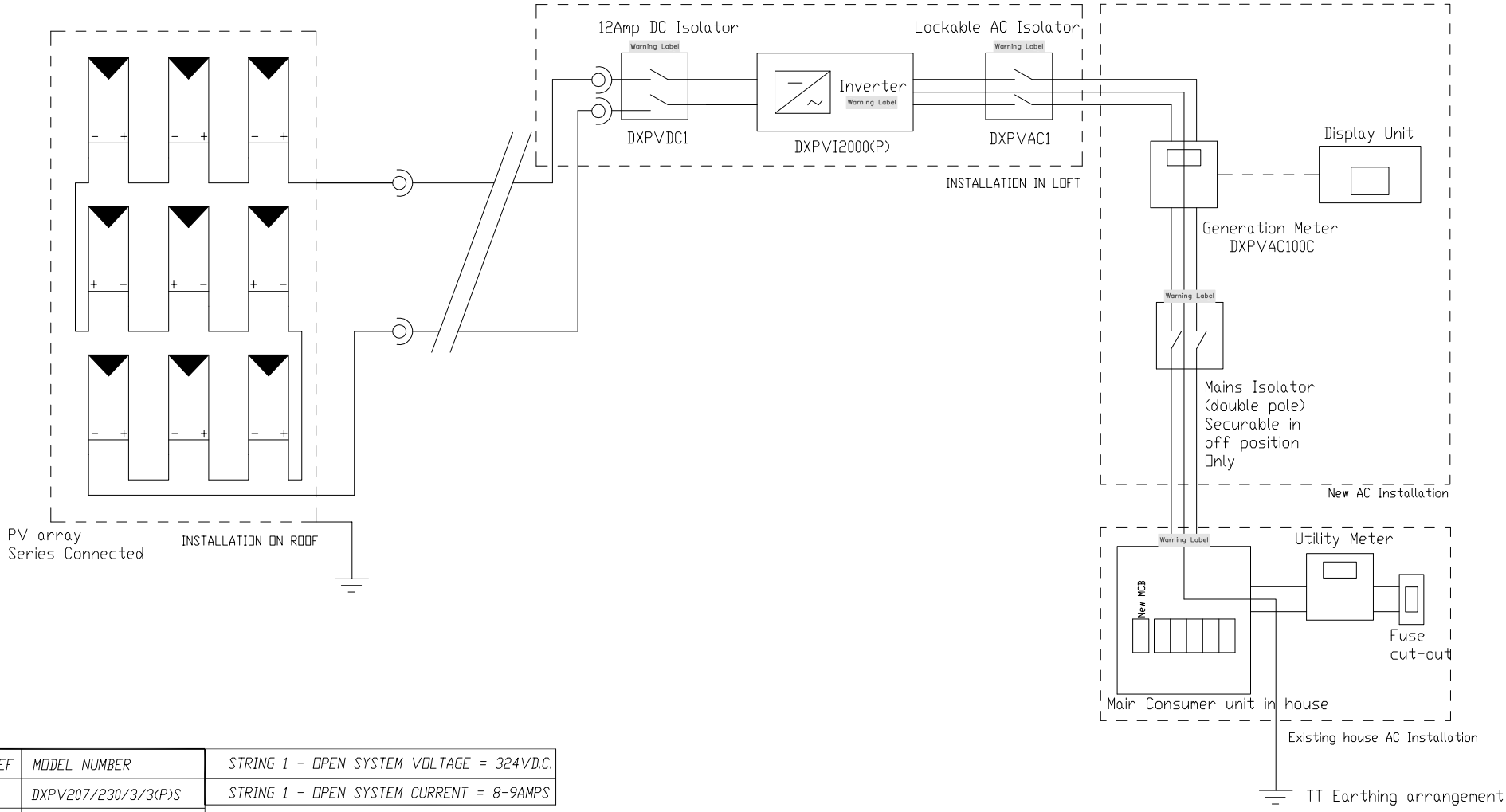
TITLE: DXPV184/230/2/4 - Output 1.84kW

NO. OFF:

DRG NO: 0/11685/0

A3

Sht 1 of 1



ITEM CODE	KIT REF	MODEL NUMBER	STRING 1 - OPEN SYSTEM VOLTAGE = 324V.D.C.
040800	17PS	DXPV207/230/3/3(P)S	STRING 1 - OPEN SYSTEM CURRENT = 8-9AMPS
040688	17PPT	DXPV207/230/3/3(P)PT	

SHUT DOWN & START UP PROCEDURE:
IF ANY PART OF THE PV CIRCUIT OR CIRCUITS FED FROM THE CONSUMER UNIT REQUIRES WORK TO BE CARRIED OUT, THE FOLLOWING PROCEDURES SHOULD BE USED.
FOR SHUT DOWN: 1. SWITCH THE RED/YELLOW ROTARY ISOLATOR ADJACENT TO THE CONSUMER UNIT TO THE 'OFF' POSITION 2. SECURE THE SWITCH IN THE OFF POSITION WITH SUITABLE PADLOCK 3. TURN OFF THE D.C. ISOLATOR
FOR START UP: 1. REVERSE PROCEDURE APPLIES 2. REMOVE THE PADLOCK ON THE ISOLATOR ADJACENT TO THE CONSUMER UNIT AND PLACE SWITCH IN THE 'ON' POSITION 3. TURN ON THE D.C. ISOLATOR

ISSUE	MODIFICATIONS	APPD	DATE	NOTES
A	RELEASE FOR APPROVAL	AJG	28/06/10	
1	RELEASE FOR PRODUCTION	AJG	28/06/10	
2	RELEASE FOR PRODUCTION	AJG	07/10/10	

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PROJECT: Photovoltaic Generator Installation

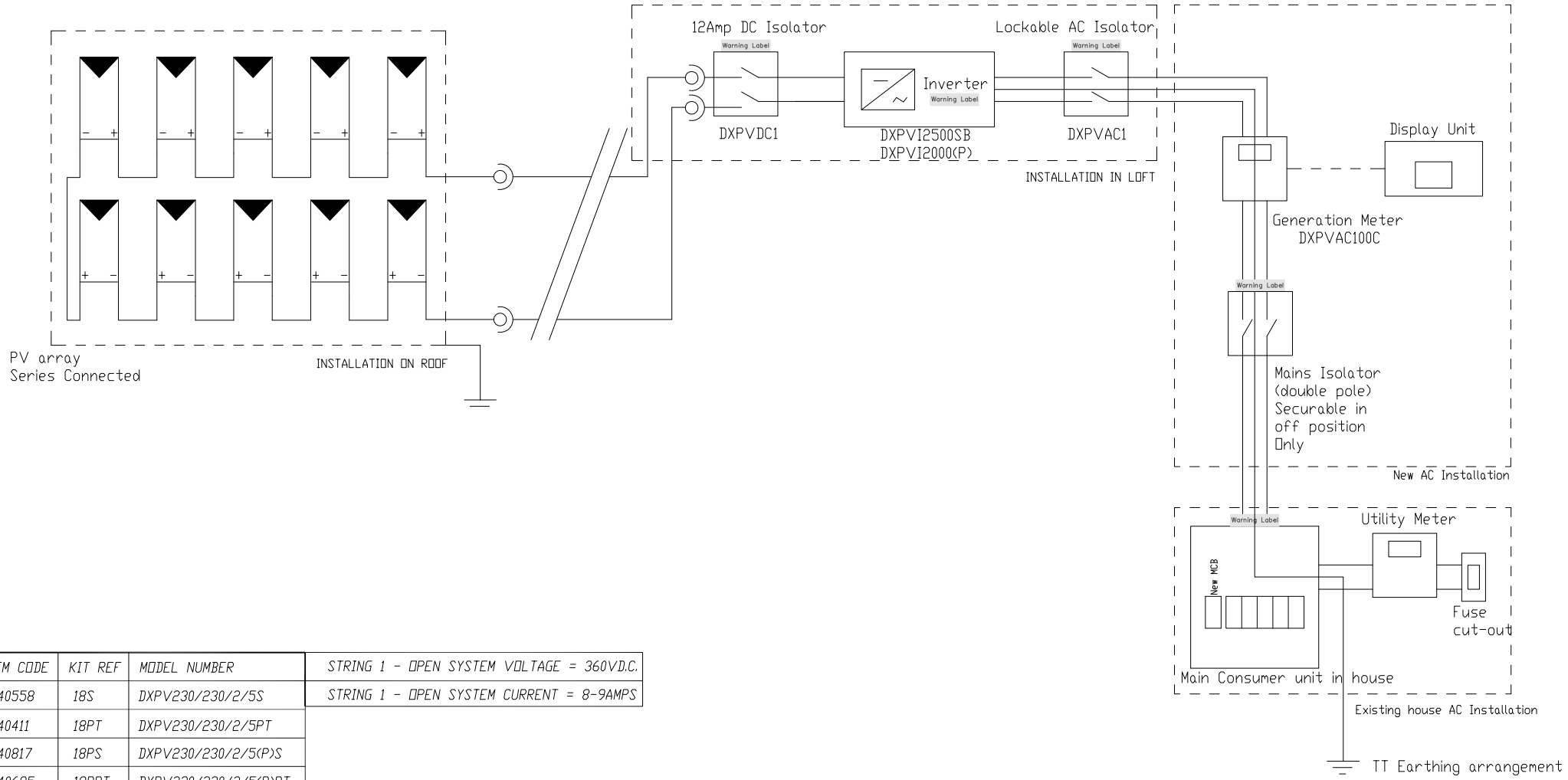
TITLE: DXPV207/230/3/3 - Output 2.07kW

NO. OFF:

DRG NO: 0/11686/0

A3

Sht 1 of 1



ITEM CODE	KIT REF	MODEL NUMBER	STRING 1 - OPEN SYSTEM VOLTAGE = 360V.D.C.
040558	18S	DXPV230/230/2/5S	STRING 1 - OPEN SYSTEM CURRENT = 8-9AMPS
040411	18PT	DXPV230/230/2/5PT	
040817	18PS	DXPV230/230/2/5(P)S	
040695	18PPT	DXPV230/230/2/5(P)PT	

SHUT DOWN & START UP PROCEDURE:
IF ANY PART OF THE PV CIRCUIT OR CIRCUITS FED FROM THE CONSUMER UNIT REQUIRES WORK TO BE CARRIED OUT, THE FOLLOWING PROCEDURES SHOULD BE USED.
FOR SHUT DOWN: 1. SWITCH THE RED/YELLOW ROTARY ISOLATOR ADJACENT TO THE CONSUMER UNIT TO THE 'OFF' POSITION 2. SECURE THE SWITCH IN THE OFF POSITION WITH SUITABLE PADLOCK 3. TURN OFF THE D.C. ISOLATOR
FOR START UP: 1. REVERSE PROCEDURE APPLIES 2. REMOVE THE PADLOCK ON THE ISOLATOR ADJACENT TO THE CONSUMER UNIT AND PLACE SWITCH IN THE 'ON' POSITION 3. TURN ON THE D.C. ISOLATOR

ISSUE	MODIFICATIONS	APPD	DATE
A	RELEASE FOR APPROVAL	AJG	28/06/10
1	RELEASE FOR PRODUCTION	AJG	28/06/10
2	RELEASE FOR PRODUCTION	AJG	07/10/10

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PROJECT
Photovoltaic Generator Installation

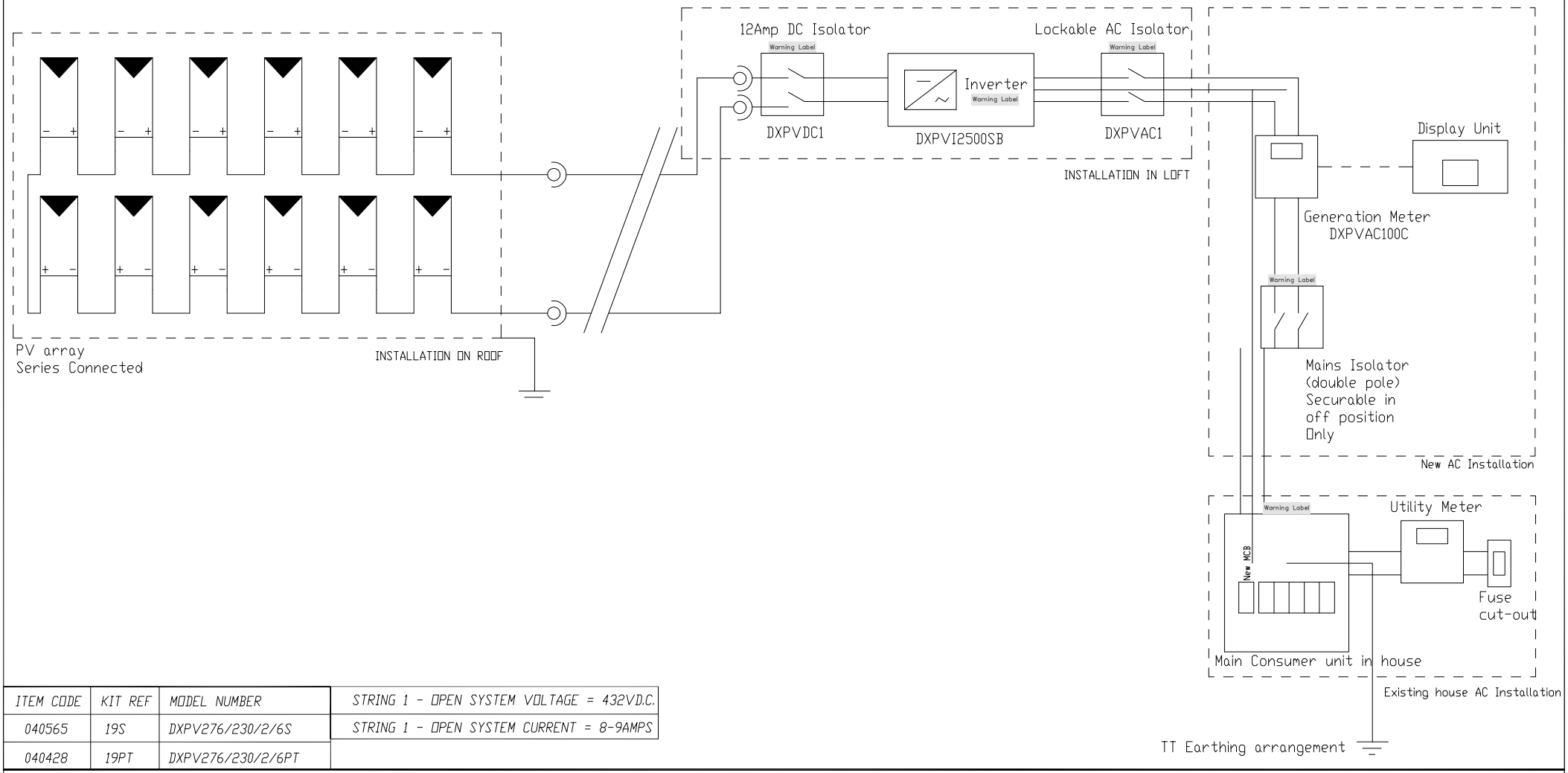
TITLE
DXPV230/230/2/5 - Output 2.3kW

NO. OFF:

DRG NO
0/11687/0

A3

Sht 1 of 1



ITEM CODE	KIT REF	MODEL NUMBER	STRING 1 - OPEN SYSTEM VOLTAGE = 432VD.C.
040565	19S	DXPV276/230/2/6S	STRING 1 - OPEN SYSTEM CURRENT = 8-9AMPS
040428	19PT	DXPV276/230/2/6PT	

SHUT DOWN & START UP PROCEDURE:
IF ANY PART OF THE PV CIRCUIT OR CIRCUITS FED FROM THE CONSUMER UNIT REQUIRES WORK TO BE CARRIED OUT, THE FOLLOWING PROCEDURES SHOULD BE USED.
FOR SHUT DOWN: 1. SWITCH THE RED/YELLOW ROTARY ISOLATOR ADJACENT TO THE CONSUMER UNIT TO THE 'OFF' POSITION 2. SECURE THE SWITCH IN THE OFF POSITION WITH SUITABLE PADLOCK 3. TURN OFF THE D.C. ISOLATOR
FOR START UP: 1. REVERSE PROCEDURE APPLIES 2. REMOVE THE PADLOCK ON THE ISOLATOR ADJACENT TO THE CONSUMER UNIT AND PLACE SWITCH IN THE 'ON' POSITION 3. TURN ON THE D.C. ISOLATOR

ISSUE	MODIFICATIONS	APPD	DATE
A	RELEASE FOR APPROVAL	AJG	28/06/10
1	RELEASE FOR PRODUCTION	AJG	28/06/10
2	RELEASE FOR PRODUCTION	AJG	07/10/10

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PROJECT
Photovoltaic Generator Installation

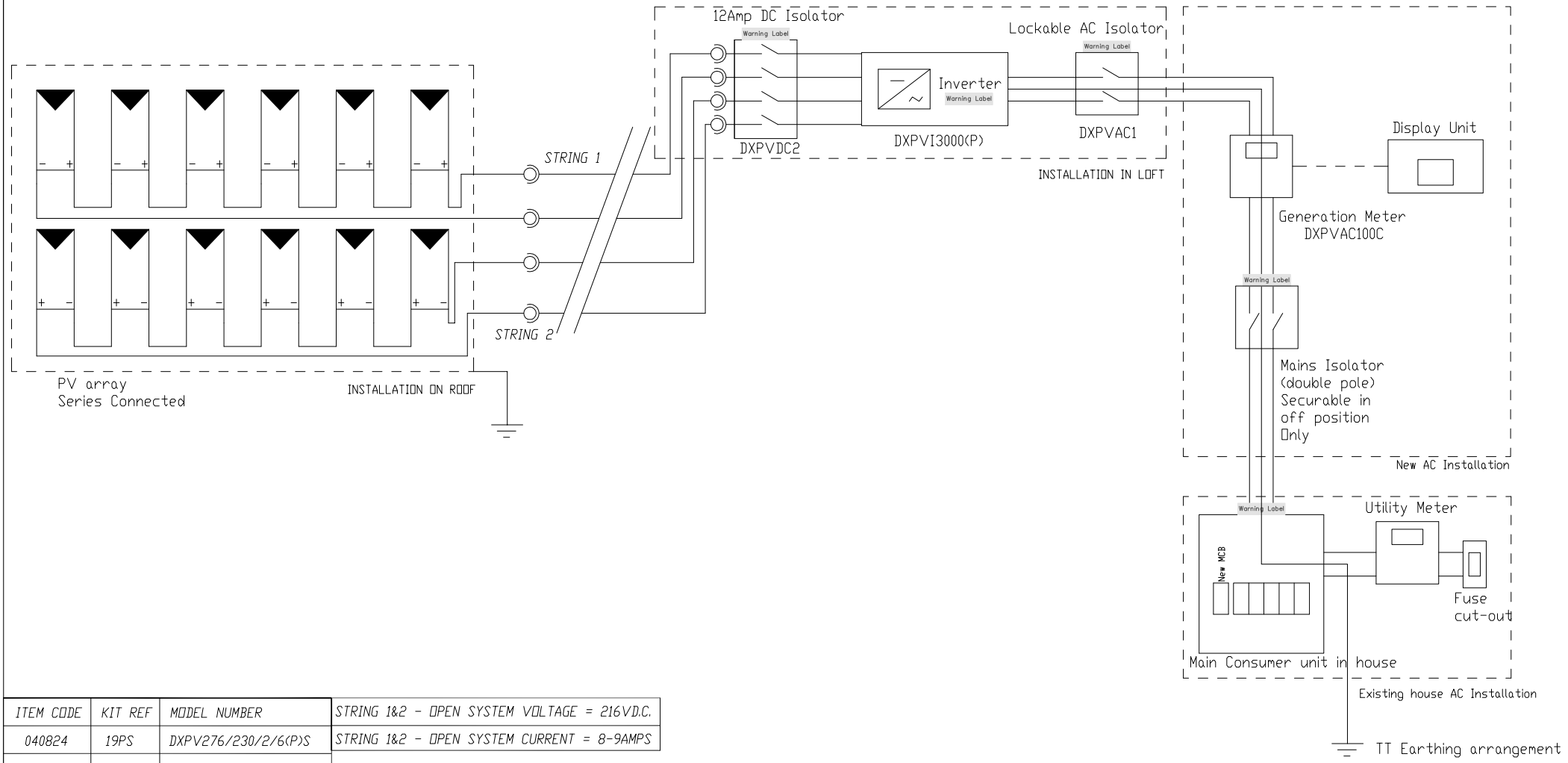
TITLE
DXPV276/230/2/6 - Output 2.76kW

NO. OFF:

DRG NO
0/11688/0

A3

Sht 1 of 1



ITEM CODE	KIT REF	MODEL NUMBER	STRING 1&2 - OPEN SYSTEM VOLTAGE = 216V.D.C.
040824	19PS	DXPV276/230/2/6(P)S	STRING 1&2 - OPEN SYSTEM CURRENT = 8-9AMPS
040701	19PPT	DXPV276/230/2/6(P)PT	

SHUT DOWN & START UP PROCEDURE:
IF ANY PART OF THE PV CIRCUIT OR CIRCUITS FED FROM THE CONSUMER UNIT REQUIRES WORK TO BE CARRIED OUT, THE FOLLOWING PROCEDURES SHOULD BE USED.
FOR SHUT DOWN: 1. SWITCH THE RED/YELLOW ROTARY ISOLATOR ADJACENT TO THE CONSUMER UNIT TO THE 'OFF' POSITION 2. SECURE THE SWITCH IN THE OFF POSITION WITH SUITABLE PADLOCK 3. TURN OFF THE D.C. ISOLATOR
FOR START UP: 1. REVERSE PROCEDURE APPLIES 2. REMOVE THE PADLOCK ON THE ISOLATOR ADJACENT TO THE CONSUMER UNIT AND PLACE SWITCH IN THE 'ON' POSITION 3. TURN ON THE D.C. ISOLATOR

ISSUE	MODIFICATIONS	APPD	DATE	NOTES
1	RELEASE FOR PRODUCTION	AJG	07/10/10	

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PROJECT: Photovoltaic Generator Installation

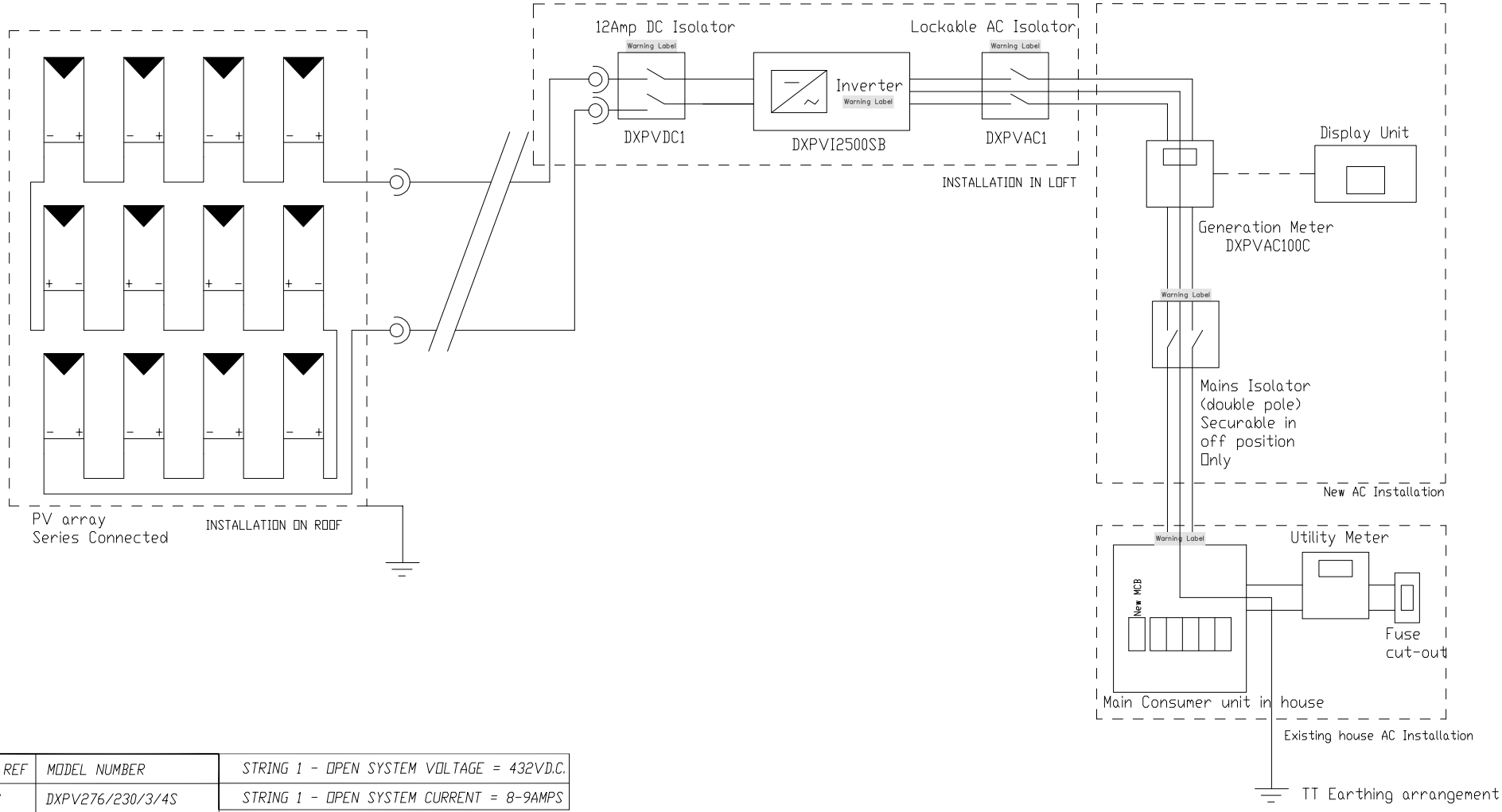
TITLE: DXPV276/230/2/6 - Output 2.76kW

NO. OFF:

DRG NO: 0/13000/0

A3

Sht 1 of 1



ITEM CODE	KIT REF	MODEL NUMBER	STRING 1 - OPEN SYSTEM VOLTAGE = 432VD.C.
040572	20S	DXPV276/230/3/4S	STRING 1 - OPEN SYSTEM CURRENT = 8-9AMPS
040435	20PT	DXPV276/230/3/4PT	

SHUT DOWN & START UP PROCEDURE:
IF ANY PART OF THE PV CIRCUIT OR CIRCUITS FED FROM THE CONSUMER UNIT REQUIRES WORK TO BE CARRIED OUT, THE FOLLOWING PROCEDURES SHOULD BE USED.
FOR SHUT DOWN: 1. SWITCH THE RED/YELLOW ROTARY ISOLATOR ADJACENT TO THE CONSUMER UNIT TO THE 'OFF' POSITION 2. SECURE THE SWITCH IN THE OFF POSITION WITH SUITABLE PADLOCK 3. TURN OFF THE D.C. ISOLATOR
FOR START UP: 1. REVERSE PROCEDURE APPLIES 2. REMOVE THE PADLOCK ON THE ISOLATOR ADJACENT TO THE CONSUMER UNIT AND PLACE SWITCH IN THE 'ON' POSITION 3. TURN ON THE D.C. ISOLATOR

ISSUE	MODIFICATIONS	APPD	DATE
A	RELEASE FOR APPROVAL	AJG	28/06/10
1	RELEASE FOR PRODUCTION	AJG	28/06/10
2	RELEASE FOR PRODUCTION	AJG	07/10/10

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PROJECT
Photovoltaic Generator Installation

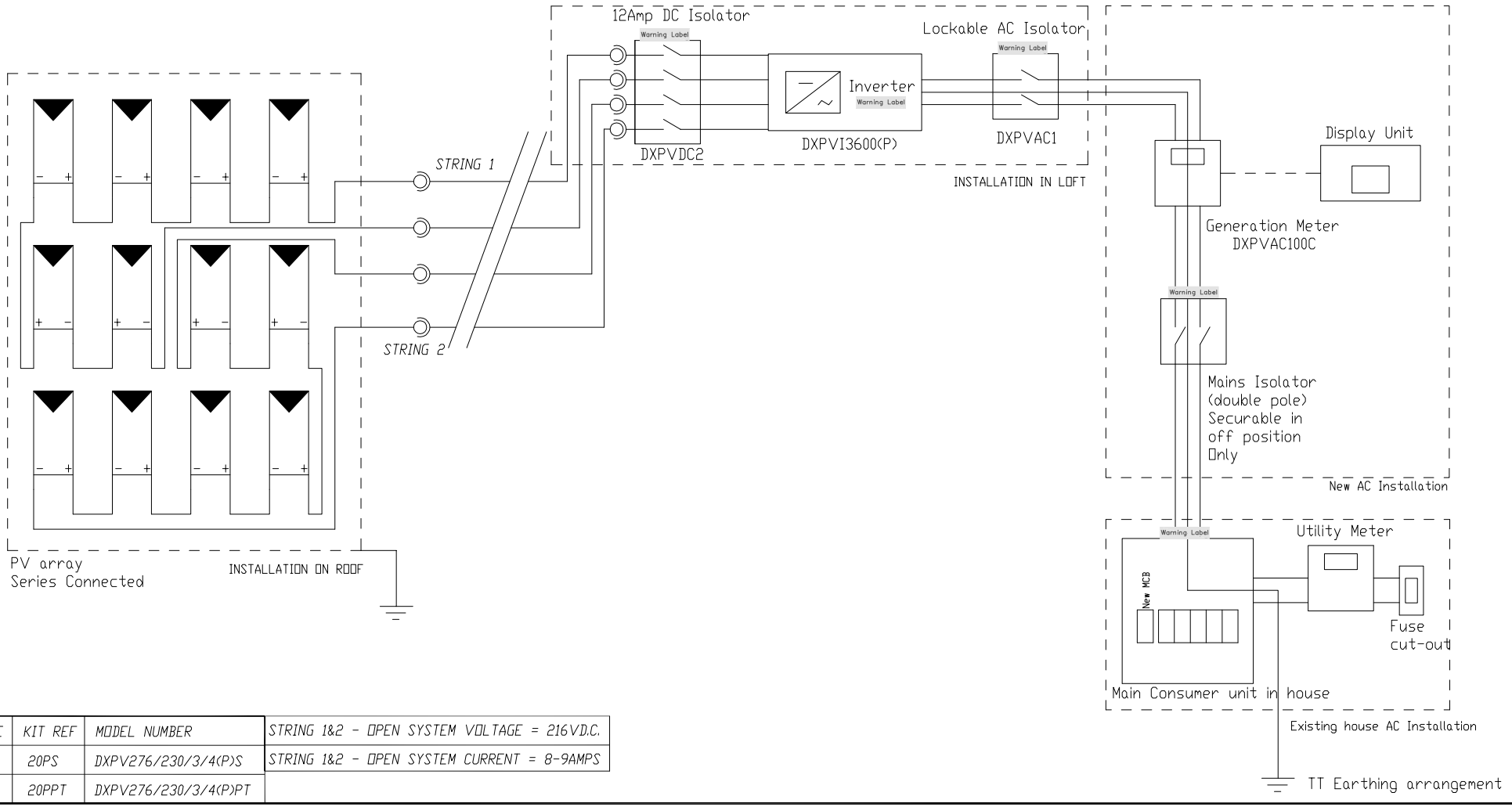
TITLE
DXPV276/230/3/4 - Output 2.76kW

NO. OFF:

DRG NO
0/11689/0

A3

Sht 1 of 1



ITEM CODE	KIT REF	MODEL NUMBER	STRING 1&2 - OPEN SYSTEM VOLTAGE = 216V.D.C.
040831	20PS	DXPV276/230/3/4(P)S	STRING 1&2 - OPEN SYSTEM CURRENT = 8-9AMPS
040718	20PPT	DXPV276/230/3/4(P)PT	

SHUT DOWN & START UP PROCEDURE:
IF ANY PART OF THE PV CIRCUIT OR CIRCUITS FED FROM THE CONSUMER UNIT REQUIRES WORK TO BE CARRIED OUT, THE FOLLOWING PROCEDURES SHOULD BE USED.
FOR SHUT DOWN: 1. SWITCH THE RED/YELLOW ROTARY ISOLATOR ADJACENT TO THE CONSUMER UNIT TO THE 'OFF' POSITION 2. SECURE THE SWITCH IN THE OFF POSITION WITH SUITABLE PADLOCK 3. TURN OFF THE D.C. ISOLATOR
FOR START UP: 1. REVERSE PROCEDURE APPLIES 2. REMOVE THE PADLOCK ON THE ISOLATOR ADJACENT TO THE CONSUMER UNIT AND PLACE SWITCH IN THE 'ON' POSITION 3. TURN ON THE D.C. ISOLATOR

ISSUE	MODIFICATIONS	APPD	DATE
1	RELEASE FOR PRODUCTION	AJG	07/10/10

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PROJECT: Photovoltaic Generator Installation

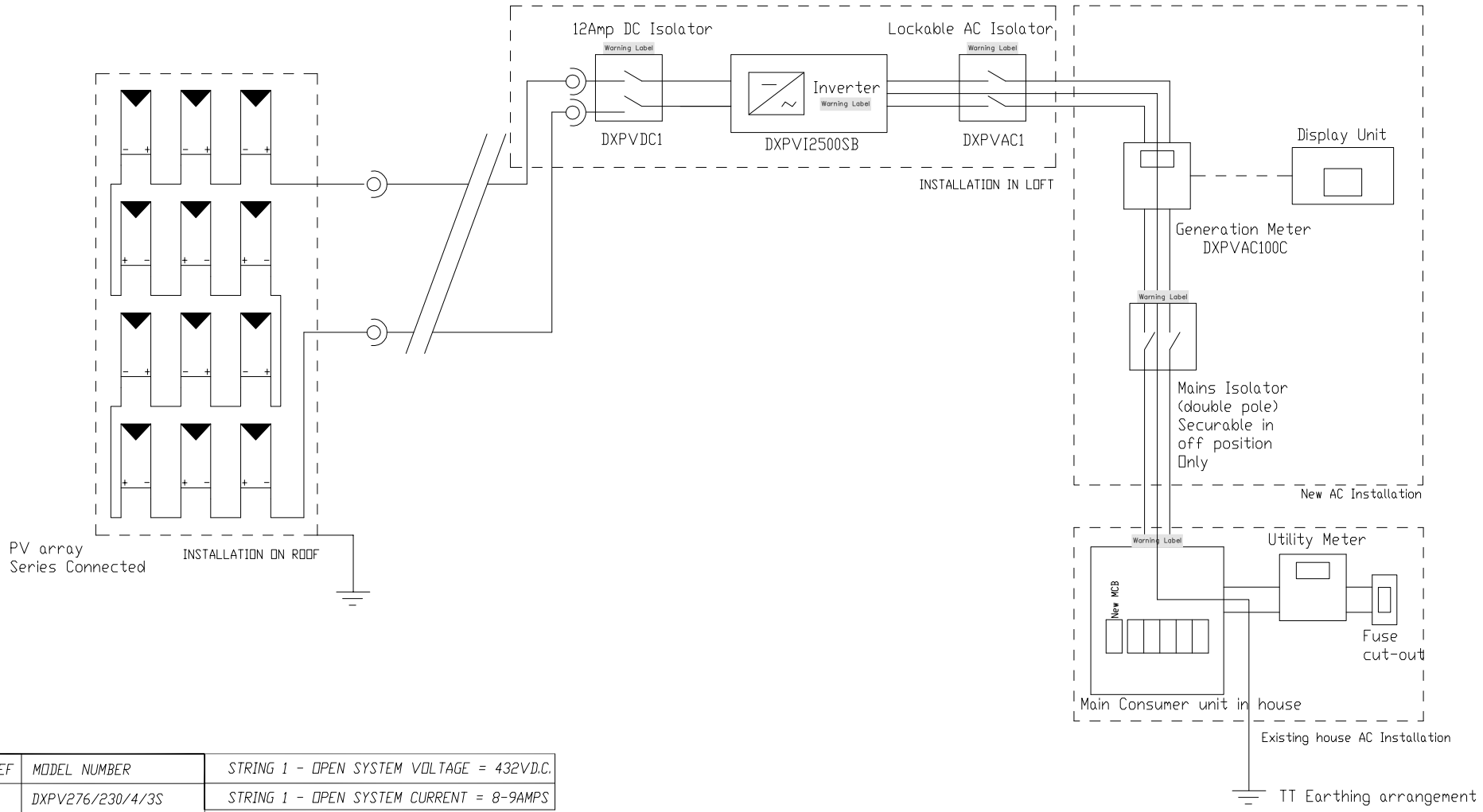
TITLE: DXPV276/230/3/4 - Output 2.76kW

NO. OFF:

DRG NO: 0/13001/0

A3

Sht 1 of 1



ITEM CODE	KIT REF	MODEL NUMBER	STRING 1 - OPEN SYSTEM VOLTAGE = 432VD.C.
040589	21S	DXPV276/230/4/3S	STRING 1 - OPEN SYSTEM CURRENT = 8-9AMPS
040442	21PT	DXPV276/230/4/3PT	

SHUT DOWN & START UP PROCEDURE:
IF ANY PART OF THE PV CIRCUIT OR CIRCUITS FED FROM THE CONSUMER UNIT REQUIRES WORK TO BE CARRIED OUT, THE FOLLOWING PROCEDURES SHOULD BE USED.
FOR SHUT DOWN: 1. SWITCH THE RED/YELLOW ROTARY ISOLATOR ADJACENT TO THE CONSUMER UNIT TO THE 'OFF' POSITION 2. SECURE THE SWITCH IN THE OFF POSITION WITH SUITABLE PADLOCK 3. TURN OFF THE D.C. ISOLATOR
FOR START UP: 1. REVERSE PROCEDURE APPLIES 2. REMOVE THE PADLOCK ON THE ISOLATOR ADJACENT TO THE CONSUMER UNIT AND PLACE SWITCH IN THE 'ON' POSITION 3. TURN ON THE D.C. ISOLATOR

ISSUE	MODIFICATIONS	APPD	DATE
A	RELEASE FOR APPROVAL	AJG	28/06/10
1	RELEASE FOR PRODUCTION	AJG	28/06/10
2	RELEASE FOR PRODUCTION	AJG	07/10/10

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PROJECT
Photovoltaic Generator Installation

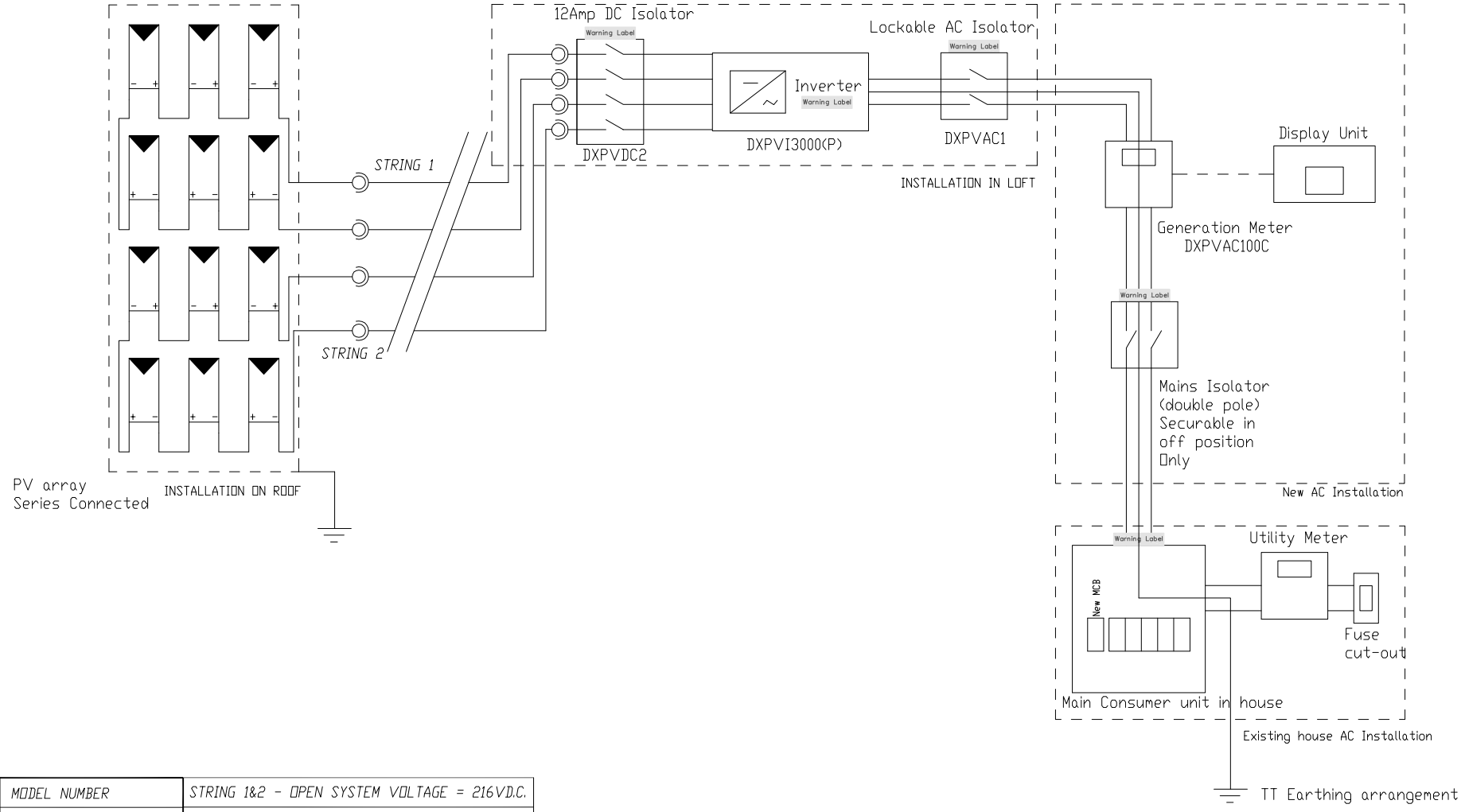
TITLE
DXPV276/230/4/3 - Output 2.76kW

NO. OFF:

DRG NO
0/11690/0

A3

Sht 1 of 1



ITEM CODE	KIT REF	MODEL NUMBER	STRING 1&2 - OPEN SYSTEM VOLTAGE = 216V.D.C.
040848	21PS	DXPV276/230/4/3(P)S	STRING 1&2 - OPEN SYSTEM CURRENT = 8-9AMPS
040725	21PPT	DXPV276/230/4/3(P)PT	

SHUT DOWN & START UP PROCEDURE:
IF ANY PART OF THE PV CIRCUIT OR CIRCUITS FED FROM THE CONSUMER UNIT REQUIRES WORK TO BE CARRIED OUT, THE FOLLOWING PROCEDURES SHOULD BE USED.
FOR SHUT DOWN: 1. SWITCH THE RED/YELLOW ROTARY ISOLATOR ADJACENT TO THE CONSUMER UNIT TO THE 'OFF' POSITION 2. SECURE THE SWITCH IN THE OFF POSITION WITH SUITABLE PADLOCK 3. TURN OFF THE D.C. ISOLATOR
FOR START UP: 1. REVERSE PROCEDURE APPLIES 2. REMOVE THE PADLOCK ON THE ISOLATOR ADJACENT TO THE CONSUMER UNIT AND PLACE SWITCH IN THE 'ON' POSITION 3. TURN ON THE D.C. ISOLATOR

ISSUE	MODIFICATIONS	APPD	DATE	NOTES
1	RELEASE FOR PRODUCTION	AJG	07/10/10	

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PROJECT
Photovoltaic Generator Installation

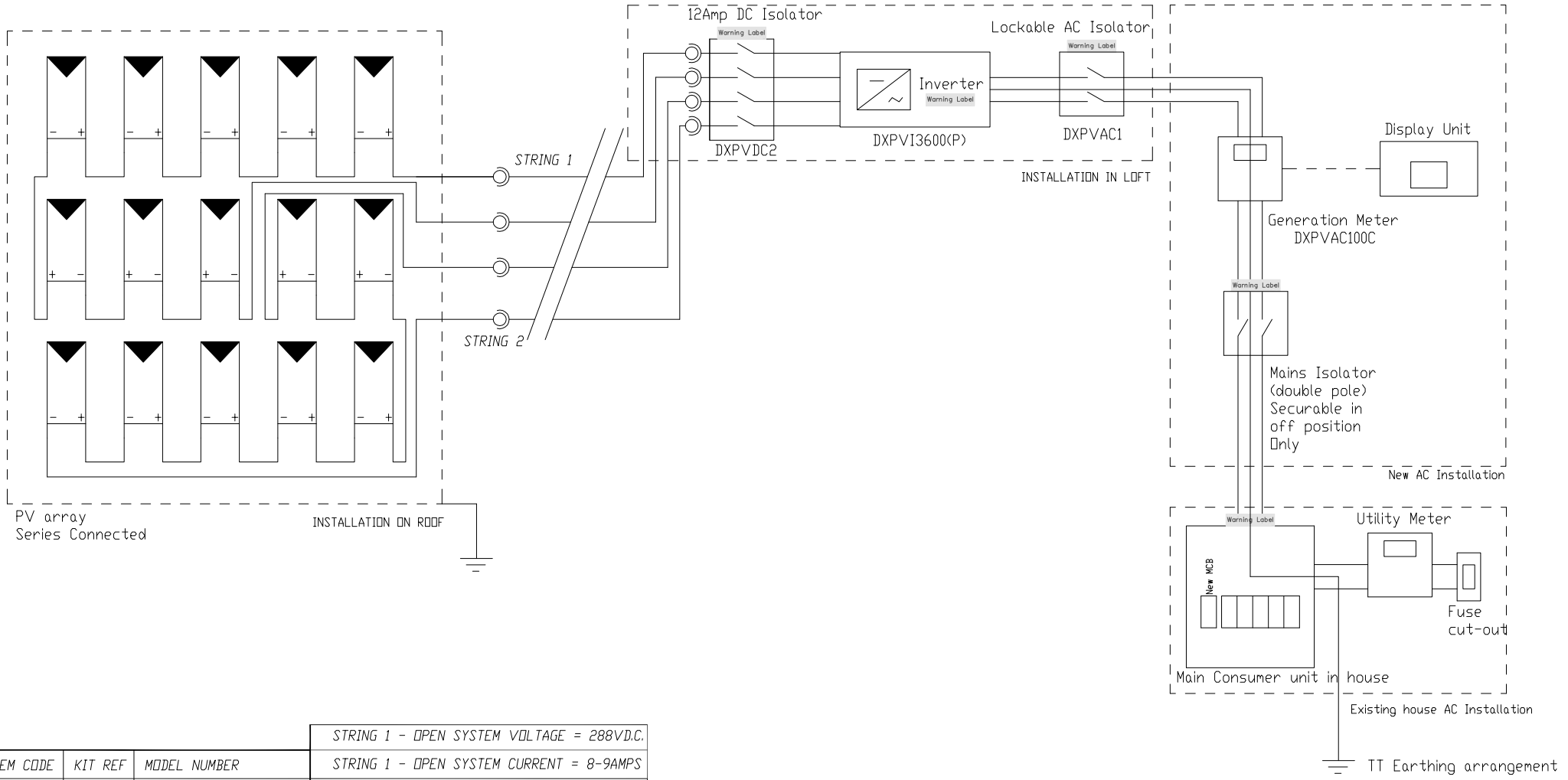
TITLE
DXPV276/230/4/3 - Output 2.76kW

NO. OFF:

DRG NO
0/13002/0

A3

Sht 1 of 1



ITEM CODE	KIT REF	MODEL NUMBER
040855	22PS	DXPV345/230/3/5(P)S
040732	22PPT	DXPV345/230/3/5(P)PT

STRING 1 - OPEN SYSTEM VOLTAGE = 288V.D.C.
STRING 1 - OPEN SYSTEM CURRENT = 8-9AMPS
STRING 2 - OPEN SYSTEM VOLTAGE = 252V.D.C.
STRING 2 - OPEN SYSTEM CURRENT = 8-9AMPS

SHUT DOWN & START UP PROCEDURE:
IF ANY PART OF THE PV CIRCUIT OR CIRCUITS FED FROM THE CONSUMER UNIT REQUIRES WORK TO BE CARRIED OUT, THE FOLLOWING PROCEDURES SHOULD BE USED.
FOR SHUT DOWN: 1. SWITCH THE RED/YELLOW ROTARY ISOLATOR ADJACENT TO THE CONSUMER UNIT TO THE 'OFF' POSITION 2. SECURE THE SWITCH IN THE OFF POSITION WITH SUITABLE PADLOCK 3. TURN OFF THE D.C. ISOLATOR
FOR START UP: 1. REVERSE PROCEDURE APPLIES 2. REMOVE THE PADLOCK ON THE ISOLATOR ADJACENT TO THE CONSUMER UNIT AND PLACE SWITCH IN THE 'ON' POSITION 3. TURN ON THE D.C. ISOLATOR

ISSUE	MODIFICATIONS	APPD	DATE
A	RELEASE FOR APPROVAL	AJG	28/06/10
1	RELEASE FOR PRODUCTION	AJG	28/06/10
2	RELEASE FOR PRODUCTION	AJG	07/10/10

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PROJECT
Photovoltaic Generator Installation

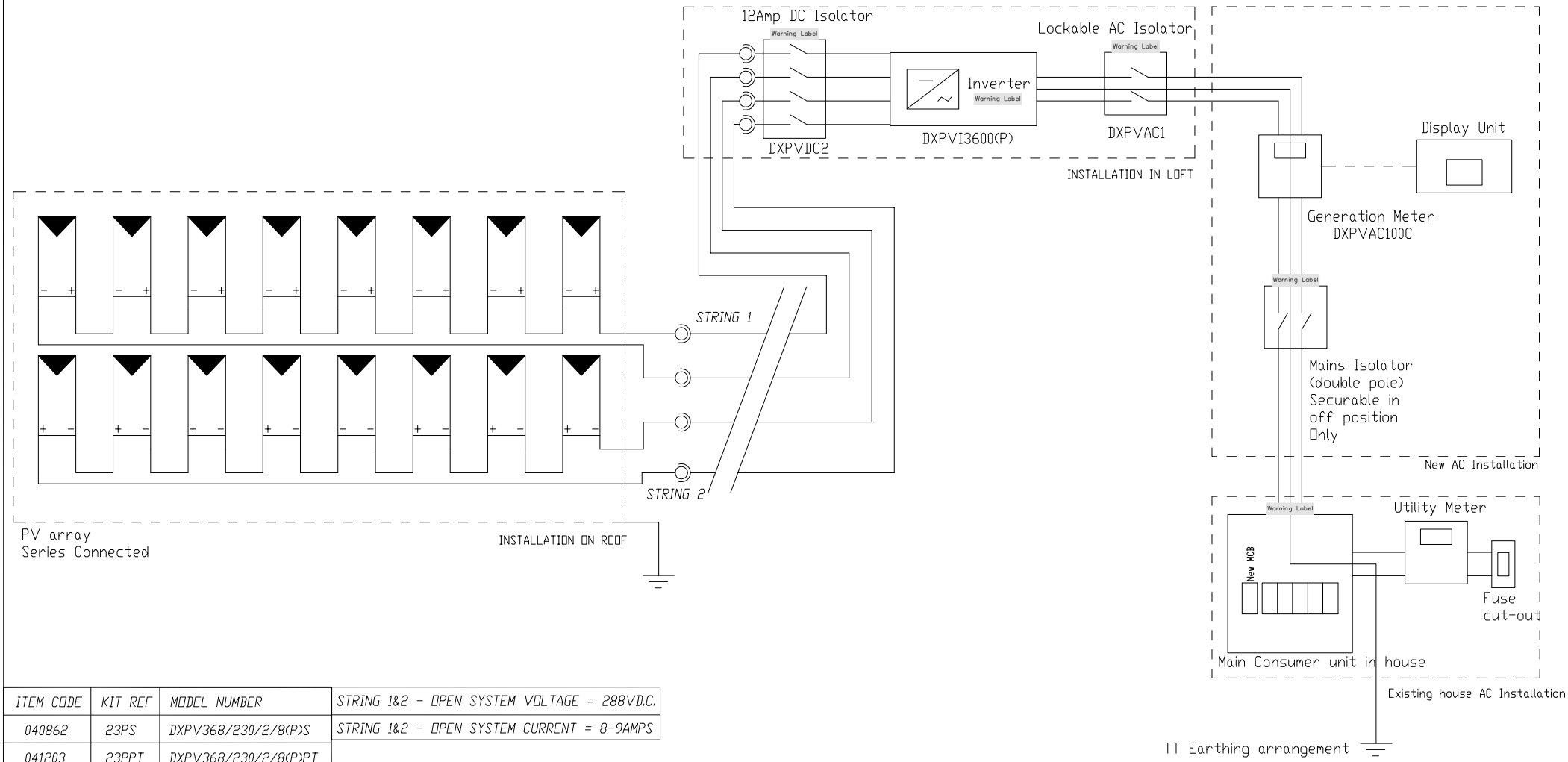
TITLE
DXPV345/230/3/5 - Output 3.45kW

NO. OFF:

DRG NO
0/11691/0

A3

Sht 1 of 1



ITEM CODE	KIT REF	MODEL NUMBER	STRING 1&2 - OPEN SYSTEM VOLTAGE = 288VD.C.
040862	23PS	DXPV368/230/2/8(P)S	STRING 1&2 - OPEN SYSTEM CURRENT = 8-9AMPS
041203	23PPT	DXPV368/230/2/8(P)PT	

SHUT DOWN & START UP PROCEDURE:
IF ANY PART OF THE PV CIRCUIT OR CIRCUITS FED FROM THE CONSUMER UNIT REQUIRES WORK TO BE CARRIED OUT, THE FOLLOWING PROCEDURES SHOULD BE USED.
FOR SHUT DOWN: 1. SWITCH THE RED/YELLOW ROTARY ISOLATOR ADJACENT TO THE CONSUMER UNIT TO THE 'OFF' POSITION 2. SECURE THE SWITCH IN THE OFF POSITION WITH SUITABLE PADLOCK 3. TURN OFF THE D.C. ISOLATOR
FOR START UP: 1. REVERSE PROCEDURE APPLIES 2. REMOVE THE PADLOCK ON THE ISOLATOR ADJACENT TO THE CONSUMER UNIT AND PLACE SWITCH IN THE 'ON' POSITION 3. TURN ON THE D.C. ISOLATOR

ISSUE	MODIFICATIONS	APPD	DATE
A	RELEASE FOR APPROVAL	AJG	28/06/10
1	RELEASE FOR PRODUCTION	AJG	28/06/10
2	RELEASE FOR PRODUCTION	AJG	07/10/10

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PROJECT
Photovoltaic Generator Installation

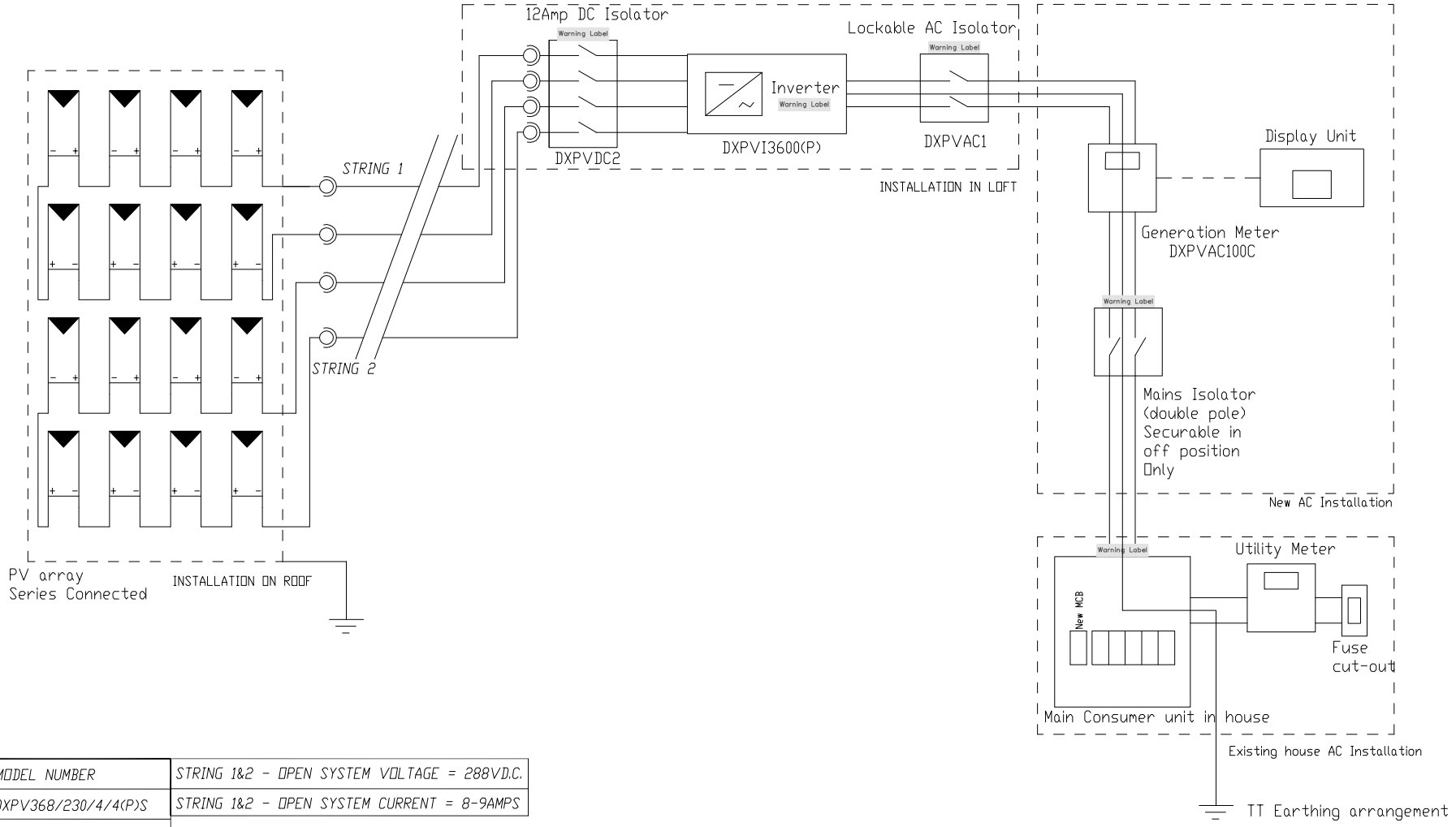
TITLE
DXPV368/230/2/8 - Output 3.68kW

NO. OFF:

DRG NO
0/11692/0

A3

Sht 1 of 1



ITEM CODE	KIT REF	MODEL NUMBER	STRING 1&2 - OPEN SYSTEM VOLTAGE = 288VD.C.
040879	24PS	DXPV368/230/4/4(P)S	STRING 1&2 - OPEN SYSTEM CURRENT = 8-9AMPS
041210	24PPT	DXPV368/230/4/4(P)PT	

SHUT DOWN & START UP PROCEDURE:
IF ANY PART OF THE PV CIRCUIT OR CIRCUITS FED FROM THE CONSUMER UNIT REQUIRES WORK TO BE CARRIED OUT, THE FOLLOWING PROCEDURES SHOULD BE USED.
FOR SHUT DOWN: 1. SWITCH THE RED/YELLOW ROTARY ISOLATOR ADJACENT TO THE CONSUMER UNIT TO THE 'OFF' POSITION 2. SECURE THE SWITCH IN THE OFF POSITION WITH SUITABLE PADLOCK 3. TURN OFF THE D.C. ISOLATOR
FOR START UP: 1. REVERSE PROCEDURE APPLIES 2. REMOVE THE PADLOCK ON THE ISOLATOR ADJACENT TO THE CONSUMER UNIT AND PLACE SWITCH IN THE 'ON' POSITION 3. TURN ON THE D.C. ISOLATOR

ISSUE	MODIFICATIONS	APPD	DATE
A	RELEASE FOR APPROVAL	AJG	28/06/10
1	RELEASE FOR PRODUCTION	AJG	28/06/10
2	RELEASE FOR PRODUCTION	AJG	07/10/10

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PROJECT
Photovoltaic Generator Installation

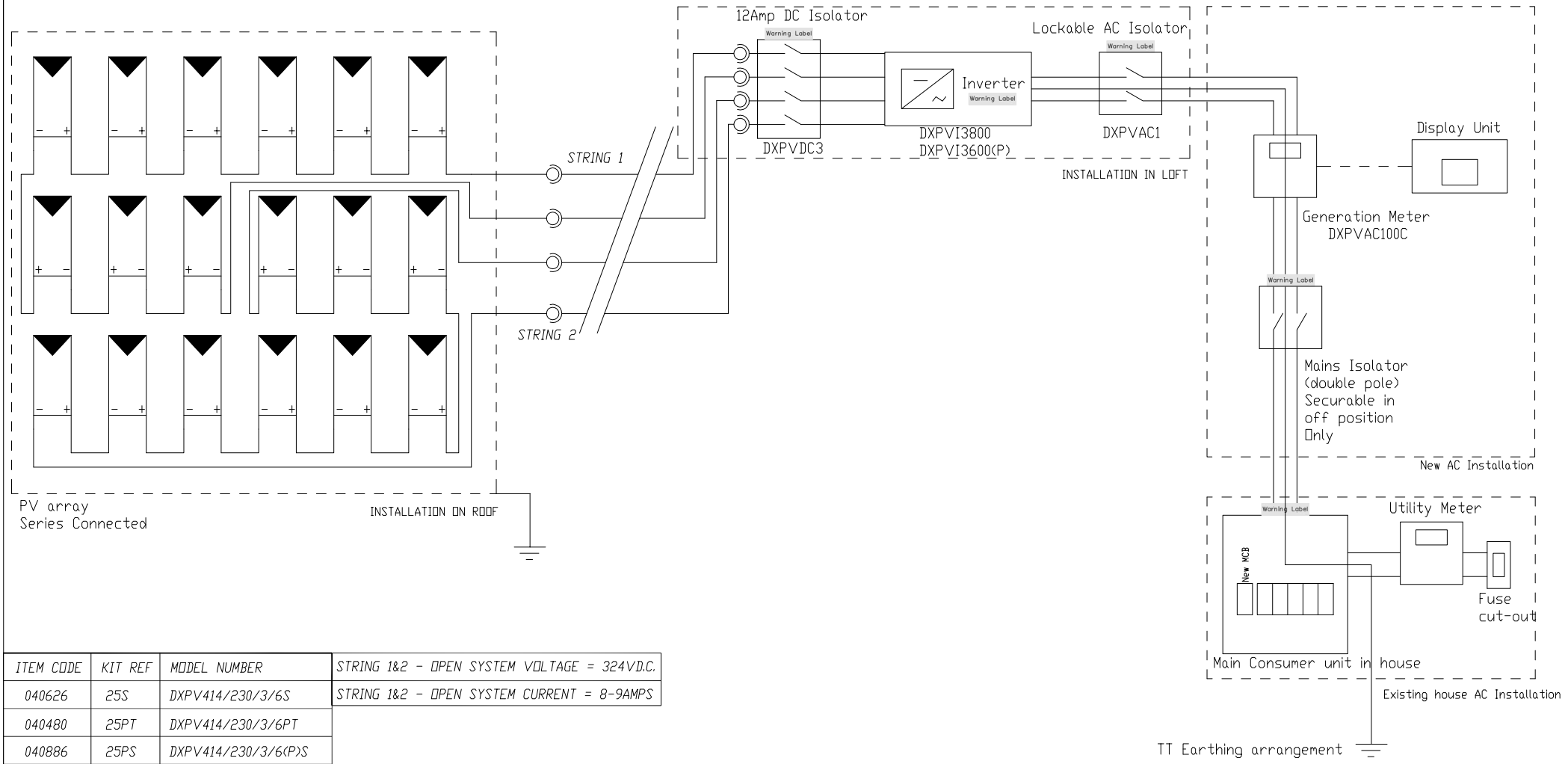
TITLE
DXPV368/230/4/4 - Output 3.68kW

NO. OFF:

DRG NO
0/11693/0

A3

Sht 1 of 1



ITEM CODE	KIT REF	MODEL NUMBER	STRING 1&2 - OPEN SYSTEM VOLTAGE = 324V.D.C.
040626	25S	DXPV414/230/3/6S	STRING 1&2 - OPEN SYSTEM CURRENT = 8-9AMPS
040480	25PT	DXPV414/230/3/6PT	
040886	25PS	DXPV414/230/3/6(P)S	
040749	25PPT	DXPV414/230/3/6(P)PT	

SHUT DOWN & START UP PROCEDURE:
IF ANY PART OF THE PV CIRCUIT OR CIRCUITS FED FROM THE CONSUMER UNIT REQUIRES WORK TO BE CARRIED OUT, THE FOLLOWING PROCEDURES SHOULD BE USED.
FOR SHUT DOWN: 1. SWITCH THE RED/YELLOW ROTARY ISOLATOR ADJACENT TO THE CONSUMER UNIT TO THE 'OFF' POSITION 2. SECURE THE SWITCH IN THE OFF POSITION WITH SUITABLE PADLOCK 3. TURN OFF THE D.C. ISOLATOR
FOR START UP: 1. REVERSE PROCEDURE APPLIES 2. REMOVE THE PADLOCK ON THE ISOLATOR ADJACENT TO THE CONSUMER UNIT AND PLACE SWITCH IN THE 'ON' POSITION 3. TURN ON THE D.C. ISOLATOR

ISSUE	MODIFICATIONS	APPD	DATE
A	RELEASE FOR APPROVAL	AJG	25/06/10
1	RELEASE FOR PRODUCTION	AJG	28/06/10
2	RELEASE FOR PRODUCTION	AJG	07/10/10

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PROJECT: Photovoltaic Generator Installation

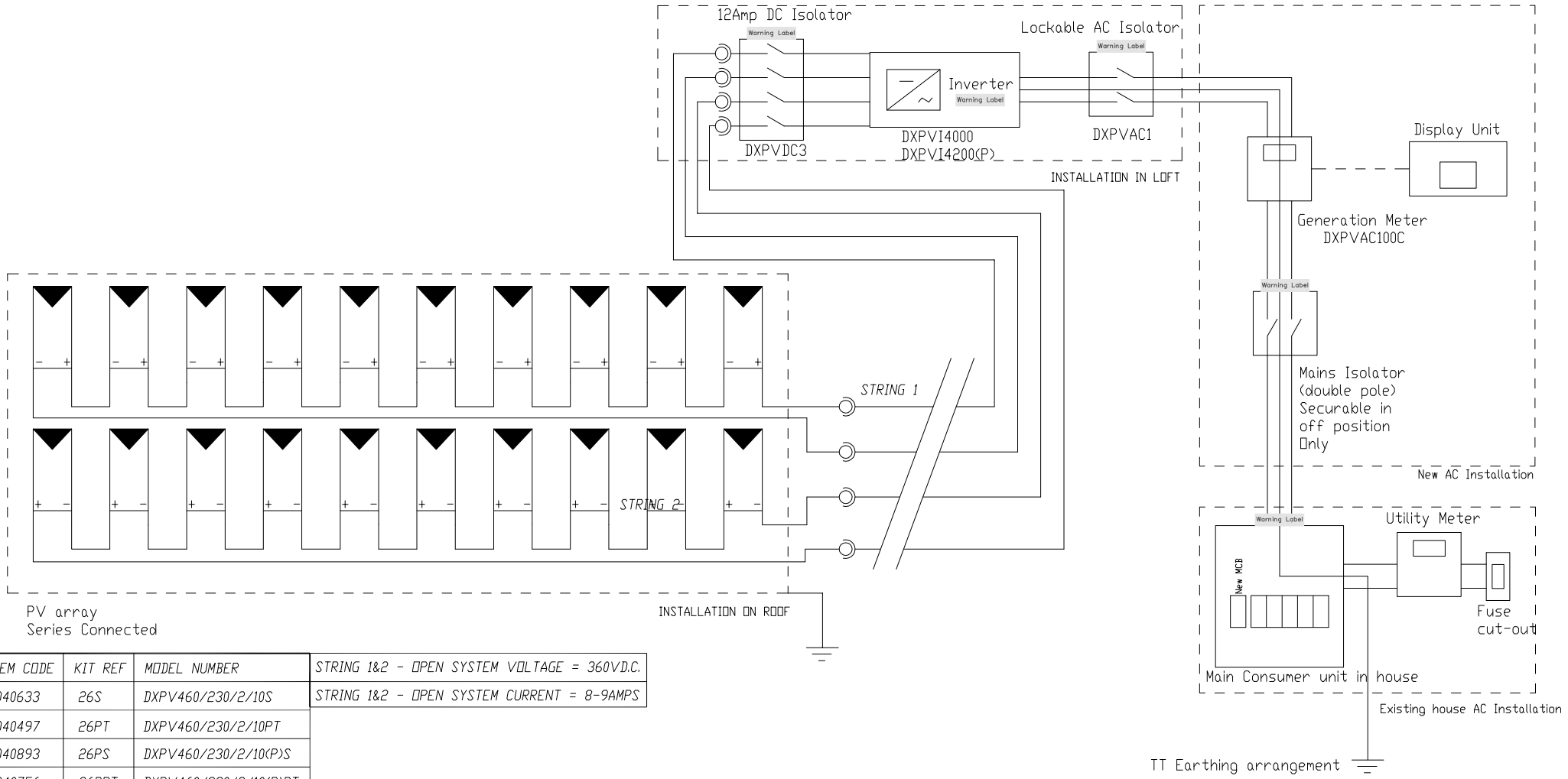
TITLE: DXPV414/230/3/6 - Output 4.14kW

NO. OFF:

DRG NO: 0/11694/0

A3

Sht 1 of 1



ITEM CODE	KIT REF	MODEL NUMBER	STRING 1&2 - OPEN SYSTEM VOLTAGE = 360V.D.C.
040633	26S	DXPV460/230/2/10S	STRING 1&2 - OPEN SYSTEM CURRENT = 8-9AMPS
040497	26PT	DXPV460/230/2/10PT	
040893	26PS	DXPV460/230/2/10(P)S	
040756	26PPT	DXPV460/230/2/10(P)PT	

SHUT DOWN & START UP PROCEDURE:
IF ANY PART OF THE PV CIRCUIT OR CIRCUITS FED FROM THE CONSUMER UNIT REQUIRES WORK TO BE CARRIED OUT, THE FOLLOWING PROCEDURES SHOULD BE USED.
FOR SHUT DOWN: 1. SWITCH THE RED/YELLOW ROTARY ISOLATOR ADJACENT TO THE CONSUMER UNIT TO THE 'OFF' POSITION 2. SECURE THE SWITCH IN THE OFF POSITION WITH SUITABLE PADLOCK 3. TURN OFF THE D.C. ISOLATOR
FOR START UP: 1. REVERSE PROCEDURE APPLIES 2. REMOVE THE PADLOCK ON THE ISOLATOR ADJACENT TO THE CONSUMER UNIT AND PLACE SWITCH IN THE 'ON' POSITION 3. TURN ON THE D.C. ISOLATOR

ISSUE	MODIFICATIONS	APPD	DATE
A	RELEASE FOR APPROVAL	AJG	28/06/10
1	RELEASE FOR PRODUCTION	AJG	28/06/10
2	RELEASE FOR PRODUCTION	AJG	07/10/10

NOTES

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PROJECT: Photovoltaic Generator Installation

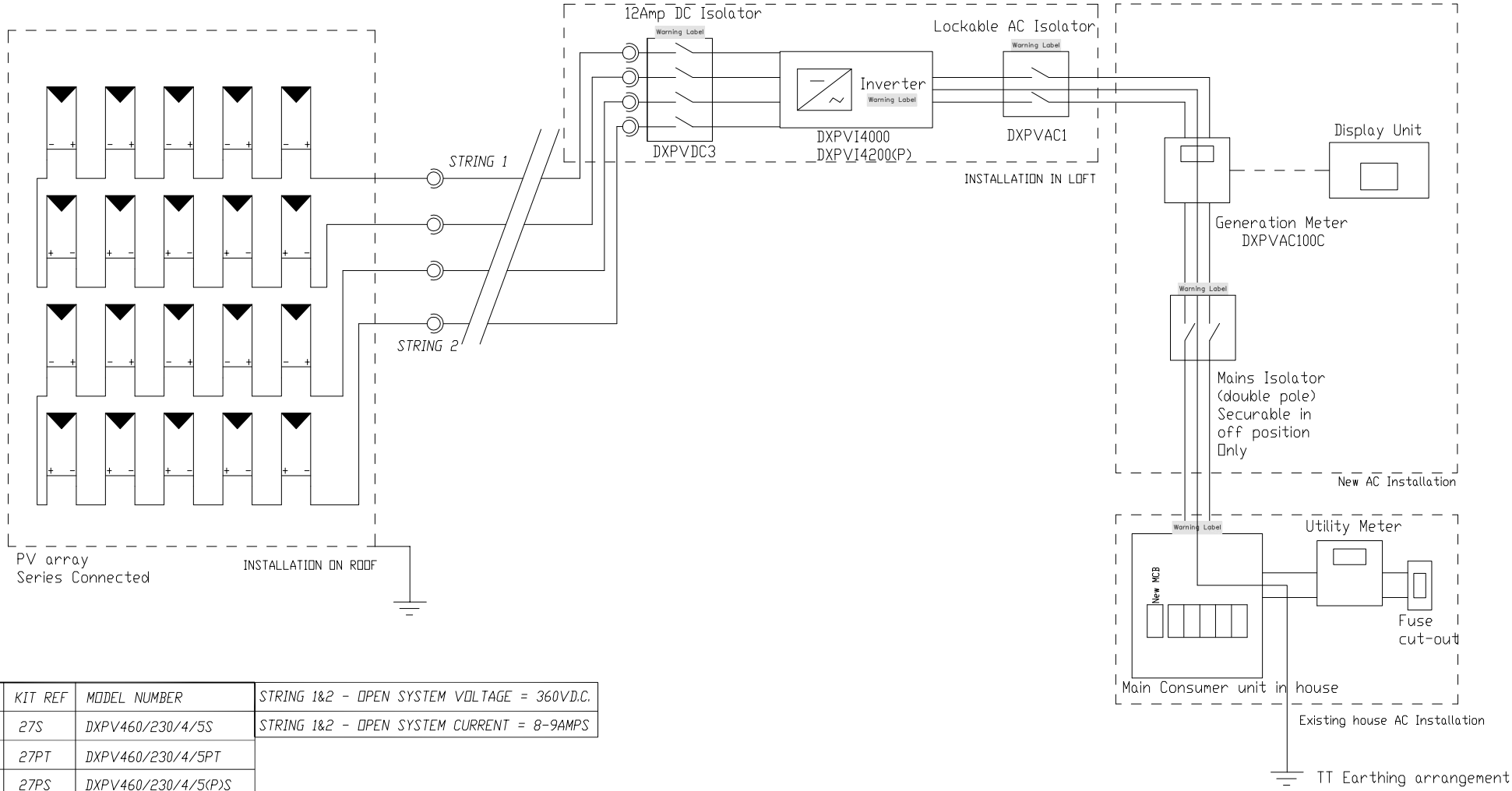
TITLE: DXPV460/230/2/10 - Output 4.6kW

NO. OFF:

DRG NO: 0/11695/0

A3

Sht 1 of 1



ITEM CODE	KIT REF	MODEL NUMBER	STRING 1&2 - OPEN SYSTEM VOLTAGE = 360V.D.C.
040640	27S	DXPV460/230/4/5S	STRING 1&2 - OPEN SYSTEM CURRENT = 8-9AMPS
040503	27PT	DXPV460/230/4/5PT	
040909	27PS	DXPV460/230/4/5(P)S	
040763	27PPT	DXPV460/230/4/5(P)PT	

SHUT DOWN & START UP PROCEDURE:
IF ANY PART OF THE PV CIRCUIT OR CIRCUITS FED FROM THE CONSUMER UNIT REQUIRES WORK TO BE CARRIED OUT, THE FOLLOWING PROCEDURES SHOULD BE USED.
FOR SHUT DOWN: 1. SWITCH THE RED/YELLOW ROTARY ISOLATOR ADJACENT TO THE CONSUMER UNIT TO THE 'OFF' POSITION 2. SECURE THE SWITCH IN THE OFF POSITION WITH SUITABLE PADLOCK 3. TURN OFF THE D.C. ISOLATOR
FOR START UP: 1. REVERSE PROCEDURE APPLIES 2. REMOVE THE PADLOCK ON THE ISOLATOR ADJACENT TO THE CONSUMER UNIT AND PLACE SWITCH IN THE 'ON' POSITION 3. TURN ON THE D.C. ISOLATOR

ISSUE	MODIFICATIONS	APPD	DATE
A	RELEASE FOR APPROVAL	AJG	28/06/10
1	RELEASE FOR PRODUCTION	AJG	28/06/10
2	RELEASE FOR PRODUCTION	AJG	07/10/10

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PROJECT
Photovoltaic Generator Installation

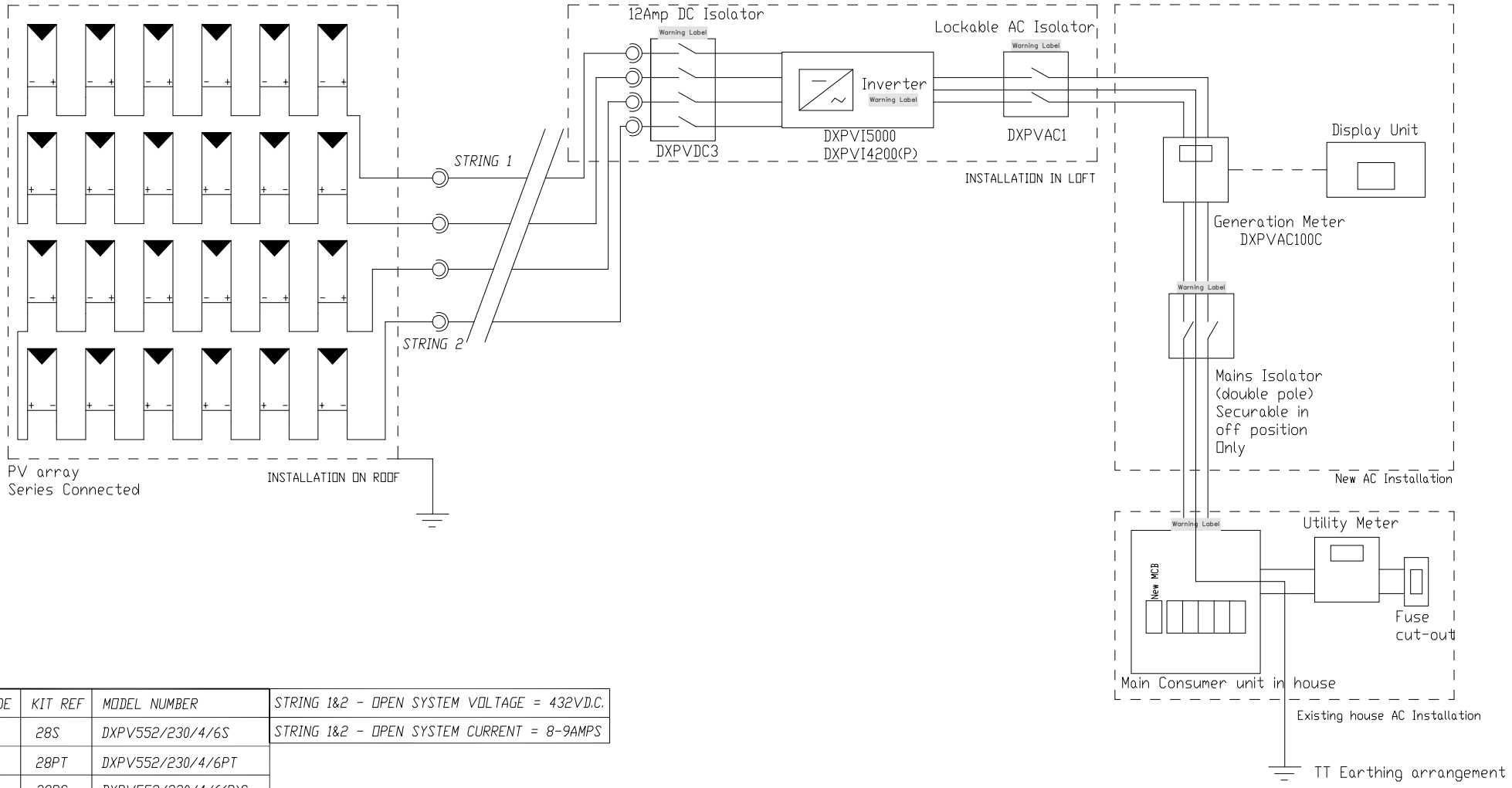
TITLE
DXPV460/230/4/5 - Output 4.6kW

NO. OFF:

DRG NO
0/11696/0

A3

Sht 1 of 1



ITEM CODE	KIT REF	MODEL NUMBER	STRING 1&2 - OPEN SYSTEM VOLTAGE = 432V.D.C.
040657	28S	DXPV552/230/4/6S	STRING 1&2 - OPEN SYSTEM CURRENT = 8-9AMPS
040510	28PT	DXPV552/230/4/6PT	
040916	28PS	DXPV552/230/4/6(P)S	
040770	28PPT	DXPV552/230/4/6(P)PT	

SHUT DOWN & START UP PROCEDURE:
IF ANY PART OF THE PV CIRCUIT OR CIRCUITS FED FROM THE CONSUMER UNIT REQUIRES WORK TO BE CARRIED OUT, THE FOLLOWING PROCEDURES SHOULD BE USED.
FOR SHUT DOWN: 1. SWITCH THE RED/YELLOW ROTARY ISOLATOR ADJACENT TO THE CONSUMER UNIT TO THE 'OFF' POSITION 2. SECURE THE SWITCH IN THE OFF POSITION WITH SUITABLE PADLOCK 3. TURN OFF THE D.C. ISOLATOR
FOR START UP: 1. REVERSE PROCEDURE APPLIES 2. REMOVE THE PADLOCK ON THE ISOLATOR ADJACENT TO THE CONSUMER UNIT AND PLACE SWITCH IN THE 'ON' POSITION 3. TURN ON THE D.C. ISOLATOR

ISSUE	MODIFICATIONS	APPD	DATE
A	RELEASE FOR APPROVAL	AJG	28/06/10
1	RELEASE FOR PRODUCTION	AJG	28/06/10
2	RELEASE FOR PRODUCTION	AJG	07/10/10

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PROJECT: Photovoltaic Generator Installation

TITLE: DXPV552/230/4/6 - Output 5.52kW

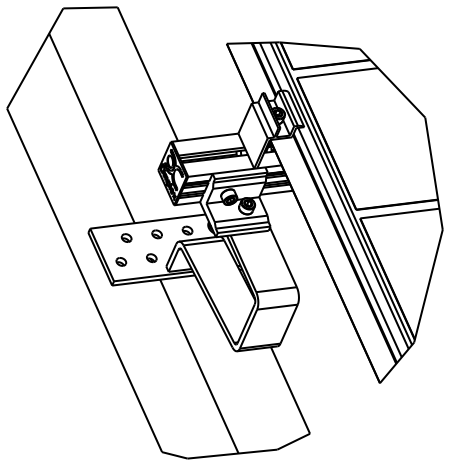
NO. OFF:

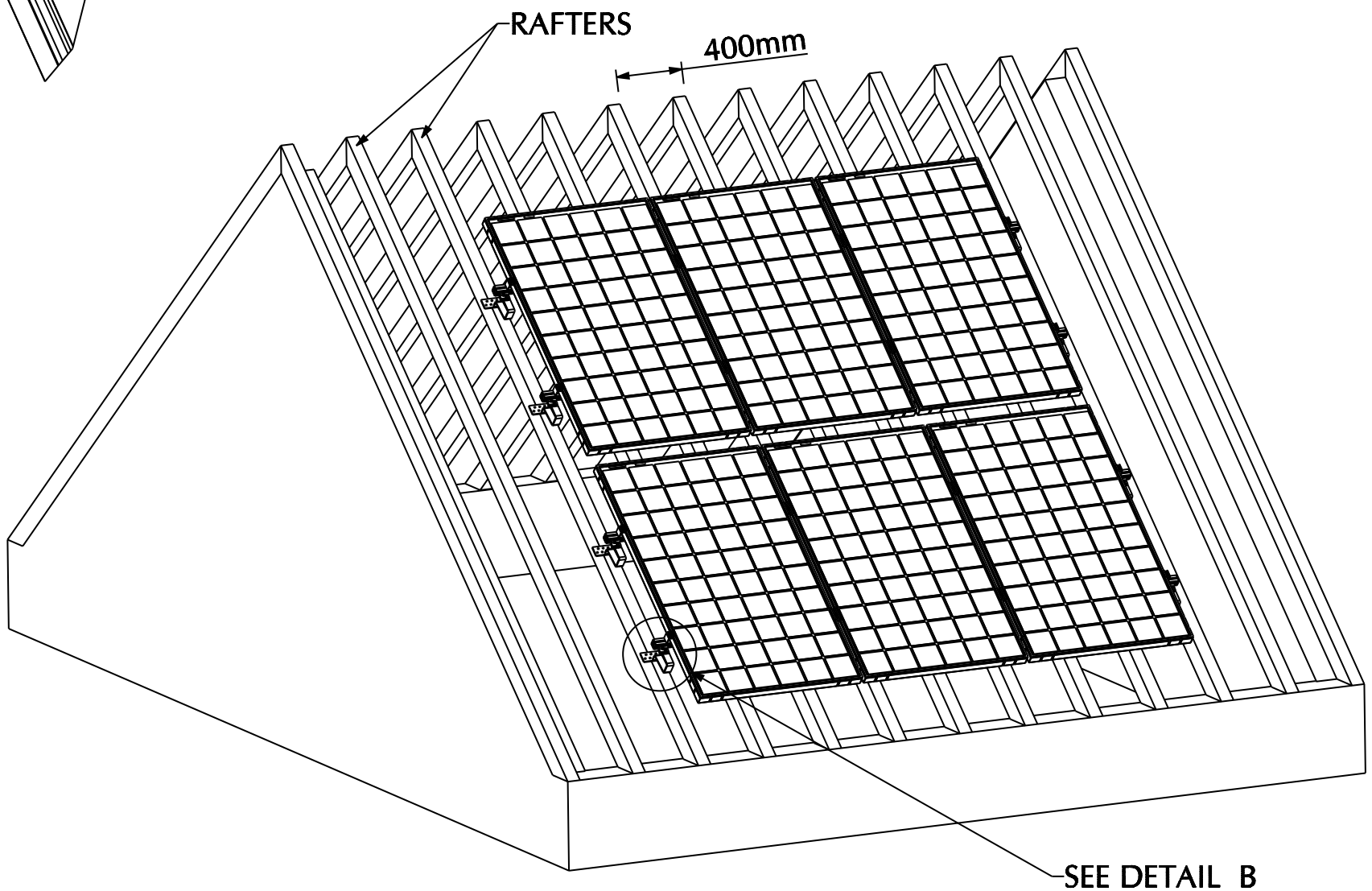
DRG NO: 0/11697/0

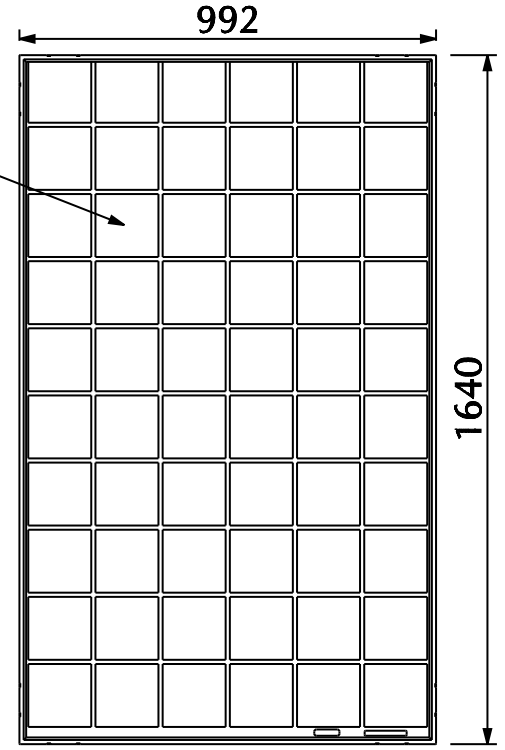
A3

Sht 1 of 1

DETAIL B
SCALE 0.150







ISSUE	MODIFICATIONS	OCN	APPD	DATE

NOTES

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THIRD ANGLE PROJECTION

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DRAWN BY	DATE	SCALE	HOLE TOL	GEN TOL
G.MURRAY	12-OCT-10		+/-0.05	0 +/-0,4
APP'D BY	DATE	DIM IN	ANGLES	0,0 +/-0,2
		mm	+/-0.5°	0,00+/-0,1

MATERIAL N/A
FINISH N/A

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PROJECT: SOLAR PV

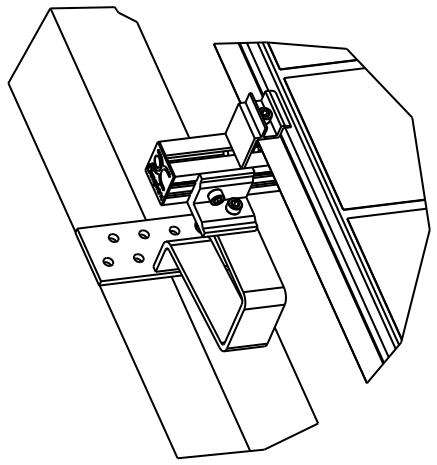
TITLE: SOLAR PANEL 2 X 3
400mm RAFTER SPACING
NO. OFF:

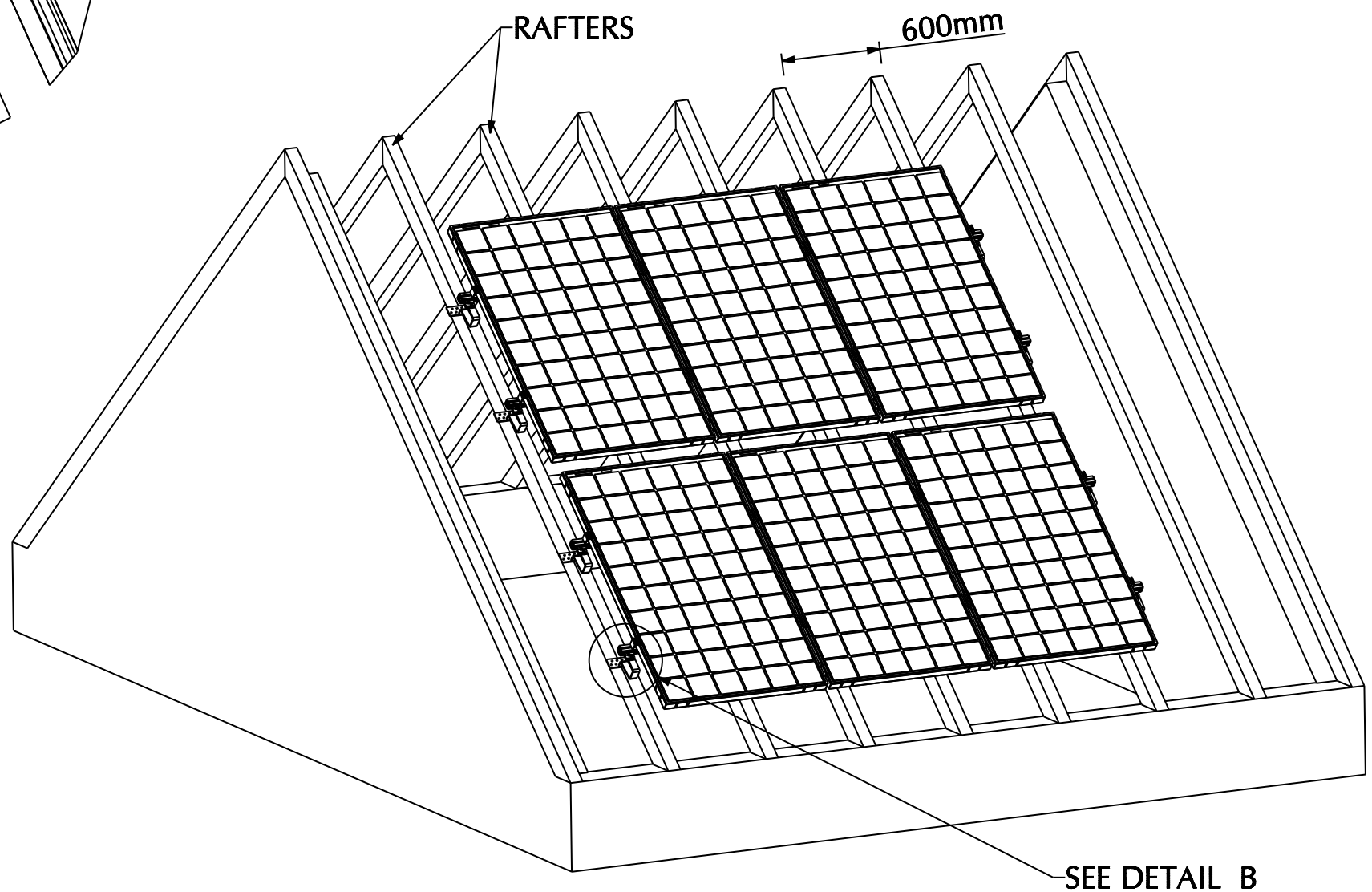
DRG NO

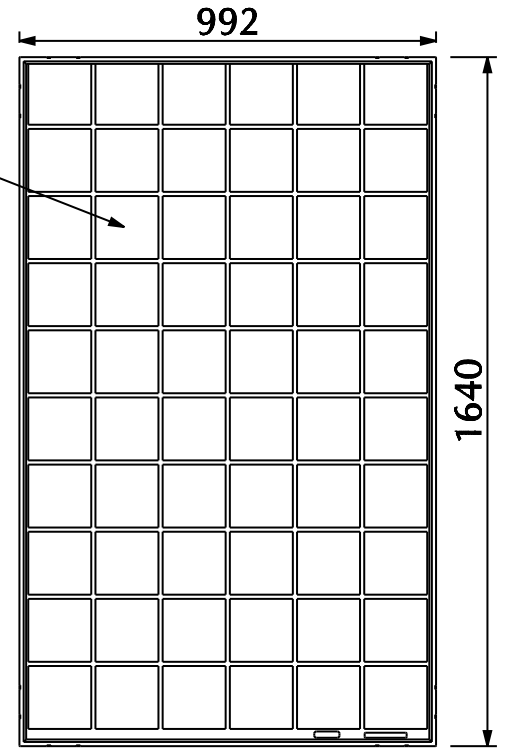
A3

Sht 2 of 2

DETAIL B
SCALE 0.150







ISSUE	MODIFICATIONS	OCN	APPD	DATE

NOTES

DO NOT SCALE
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THIRD ANGLE PROJECTION

Dimplex renewables®
Dunleer, Co.Louth, Ireland.

DRAWN BY	DATE	SCALE	HOLE TOL	GEN TOL
G.MURRAY	12-OCT-10		+/-0.05	0 +/-0,4
APP'D BY	DATE	DIM IN	ANGLES	0,0 +/-0,2
		mm	+/-0.5°	0,00+/-0,1

MATERIAL N/A
FINISH N/A

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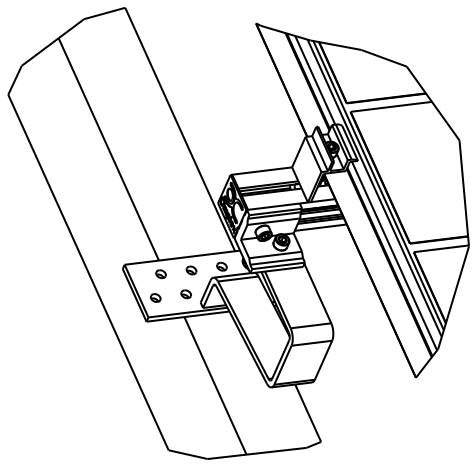
PROJECT SOLAR PV

TITLE
SOLAR PANEL 2 X 3
600mm RAFTER SPACING
NO. OFF:

DRG NO

A3

Sht 2 of 2



DETAIL A
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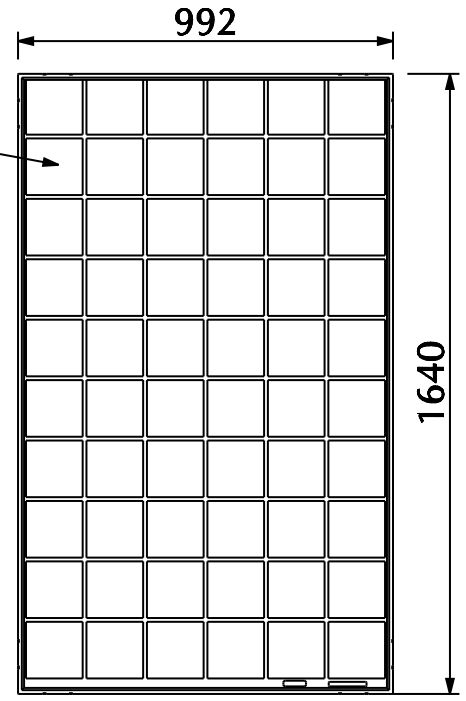
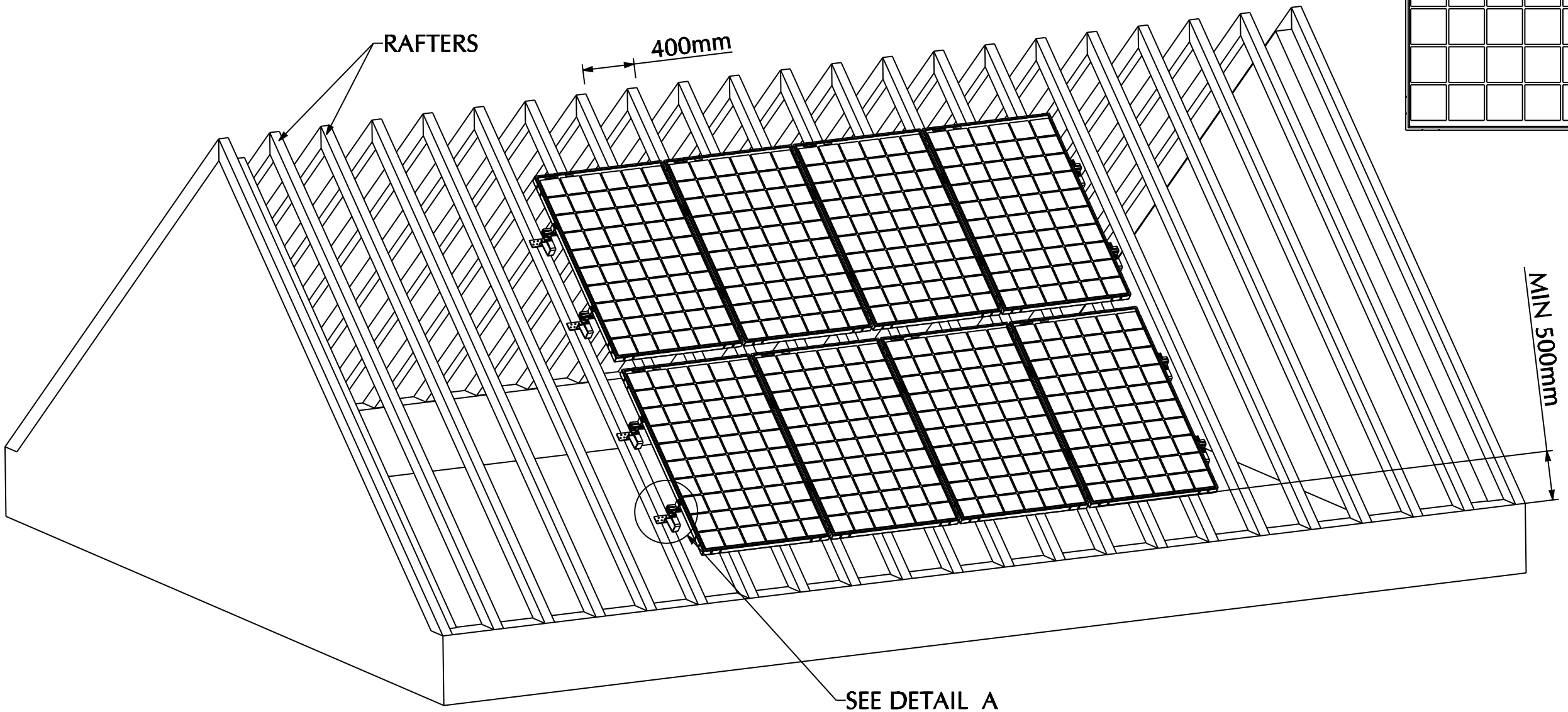


SOLAR PANEL



ISSUE	MODIFICATIONS	OCN	APPD	DATE

NOTES

DO NOT SCALE

IF IN DOUBT ASK

THIRD ANGLE PROJECTION

Dimplex renewables®
Dunleer, Co.Louth, Ireland.

DRAWN BY	DATE	SCALE	HOLE TOL	GEN TOL
G.Murray	15-OCT-10		+/-0.05	0 +/-0,4
APP'D BY	DATE	DIM IN	ANGLES	0,0 +/-0,2
		mm	+/-0.5°	0,00+/-0,1

MATERIAL N/A:

FINISH N/A:

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PROJECT SOLAR PV

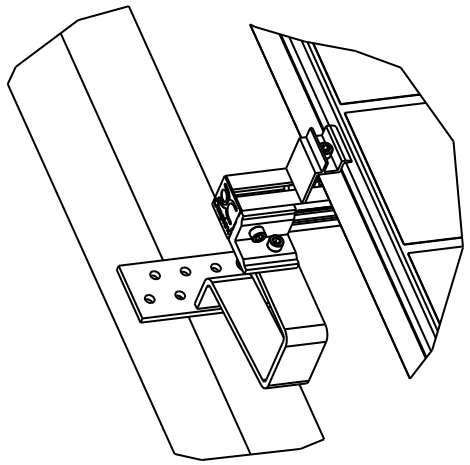
TITLE
SOLAR PANEL 2 X 4 400mm
RAFTER SPACING

NO. OFF:

DRG NO

A3

Sht 1 of 1



DETAIL A
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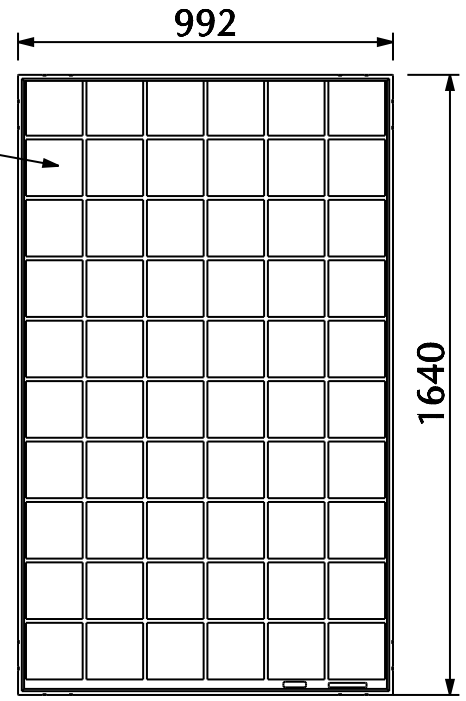

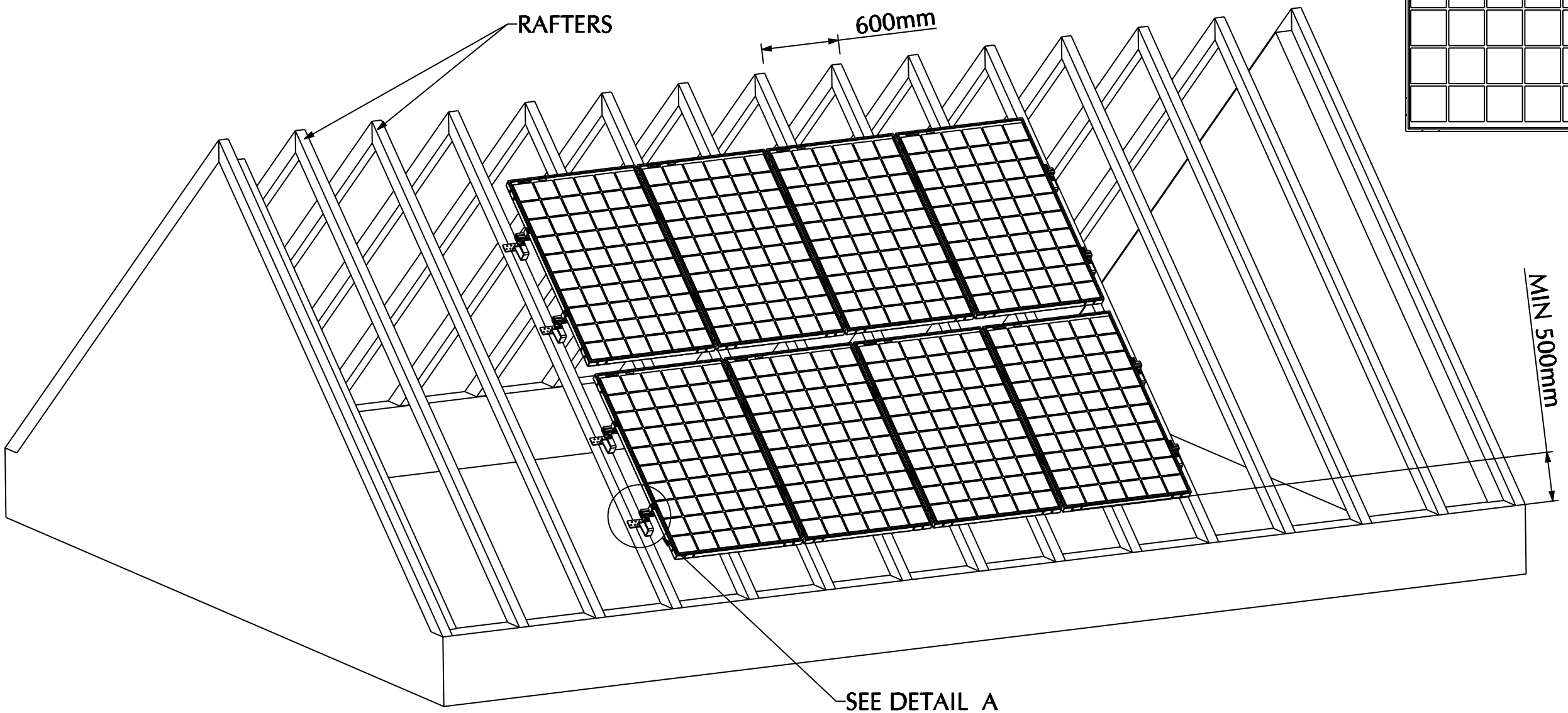

ISSUE	MODIFICATIONS	OCN	APPD	DATE

NOTES

DO NOT SCALE

IF IN DOUBT ASK

THIRD ANGLE PROJECTION

Dimplex renewables®
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DRAWN BY	DATE	SCALE	HOLE TOL	GEN TOL
G.Murray	15-OCT-10		+/-0.05	0 +/-0,4
APP'D BY	DATE	DIM IN	ANGLES	0,0 +/-0,2
		mm	+/-0.5°	0,00+/-0,1

MATERIAL N/A

FINISH N/A

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PROJECT SOLAR PV

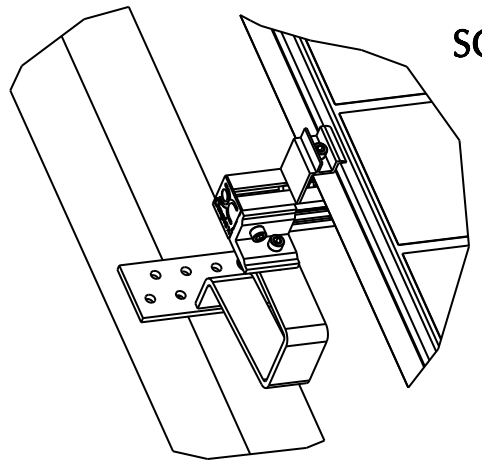
TITLE
SOLAR PANEL 2 x 4
600mm RAFTER SPACING
NO. OFF:

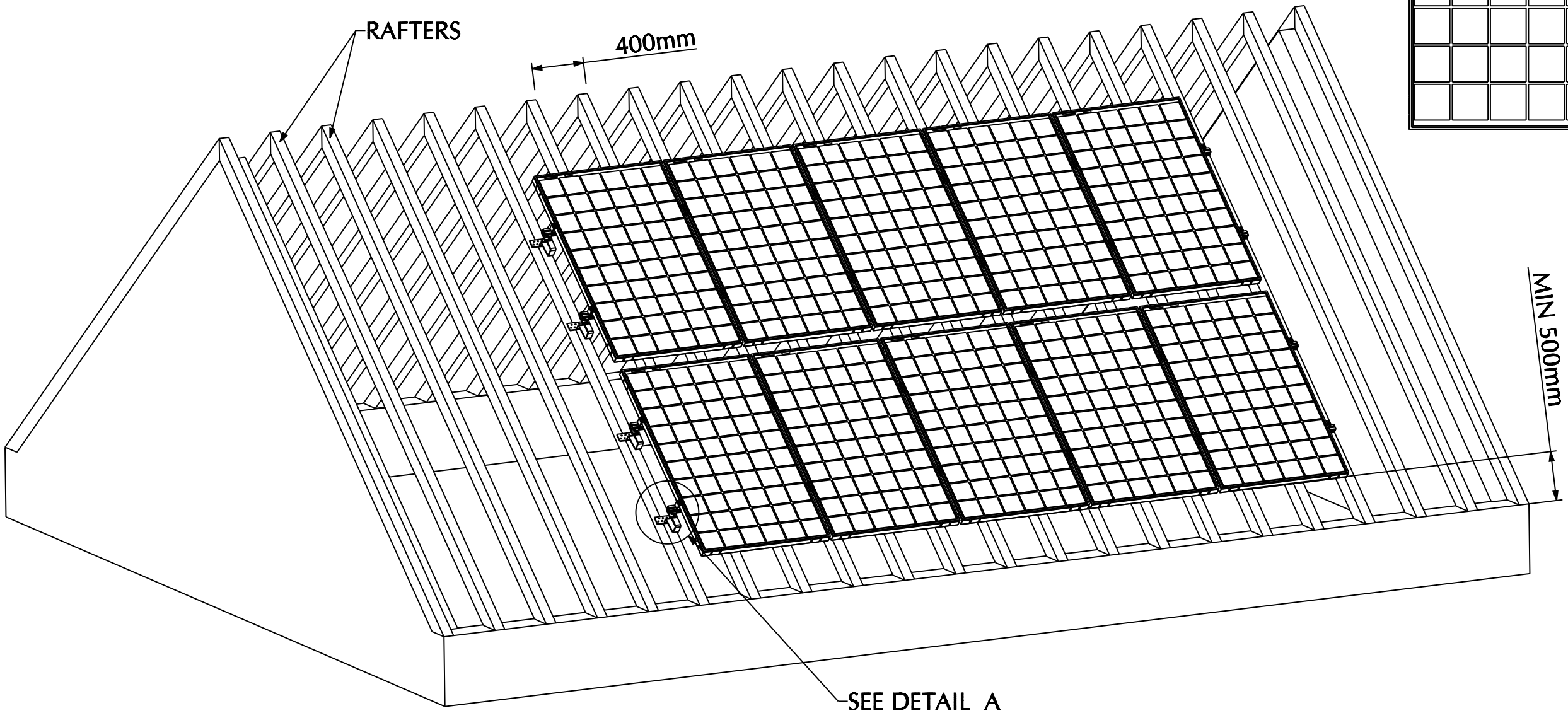
DRG NO

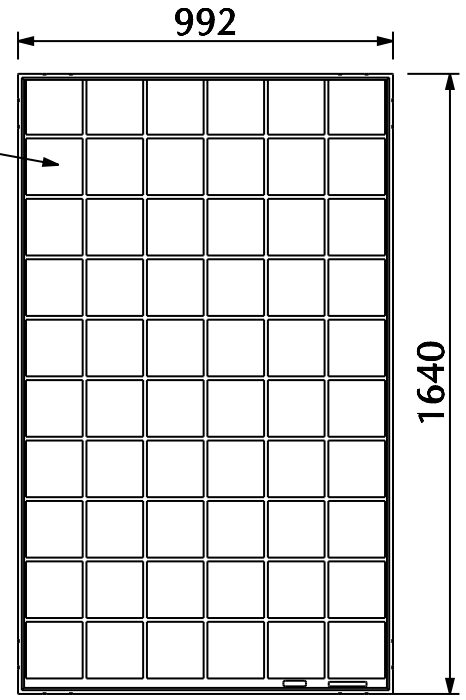
A3

Sht 1 of 1

DETAIL A
SCALE 0.150







ISSUE	MODIFICATIONS	OCN	APPD	DATE

NOTES

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IF IN DOUBT ASK
THIRD ANGLE PROJECTION

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DRAWN BY	DATE	SCALE	HOLE TOL	GEN TOL
G.Murray	15-OCT-10		+/-0.05	0 +/-0,4
APP'D BY	DATE	DIM IN	ANGLES	0,0 +/-0,2
		mm	+/-0.5°	0,00+/-0,1

MATERIAL N/A
FINISH N/A

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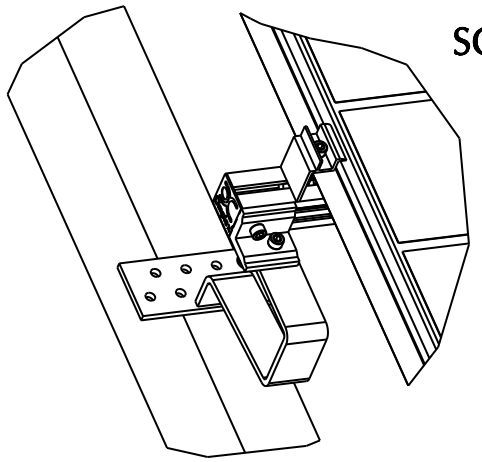
PROJECT: SOLAR PV

TITLE: SOLAR PANEL 2 X 5
400mm RAFTER SPACING
NO. OFF:

DRG NO: A3

Sht 1 of 1



DETAIL A
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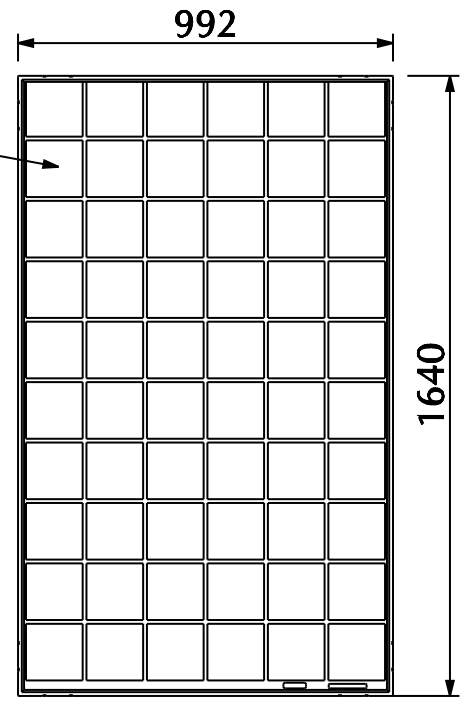

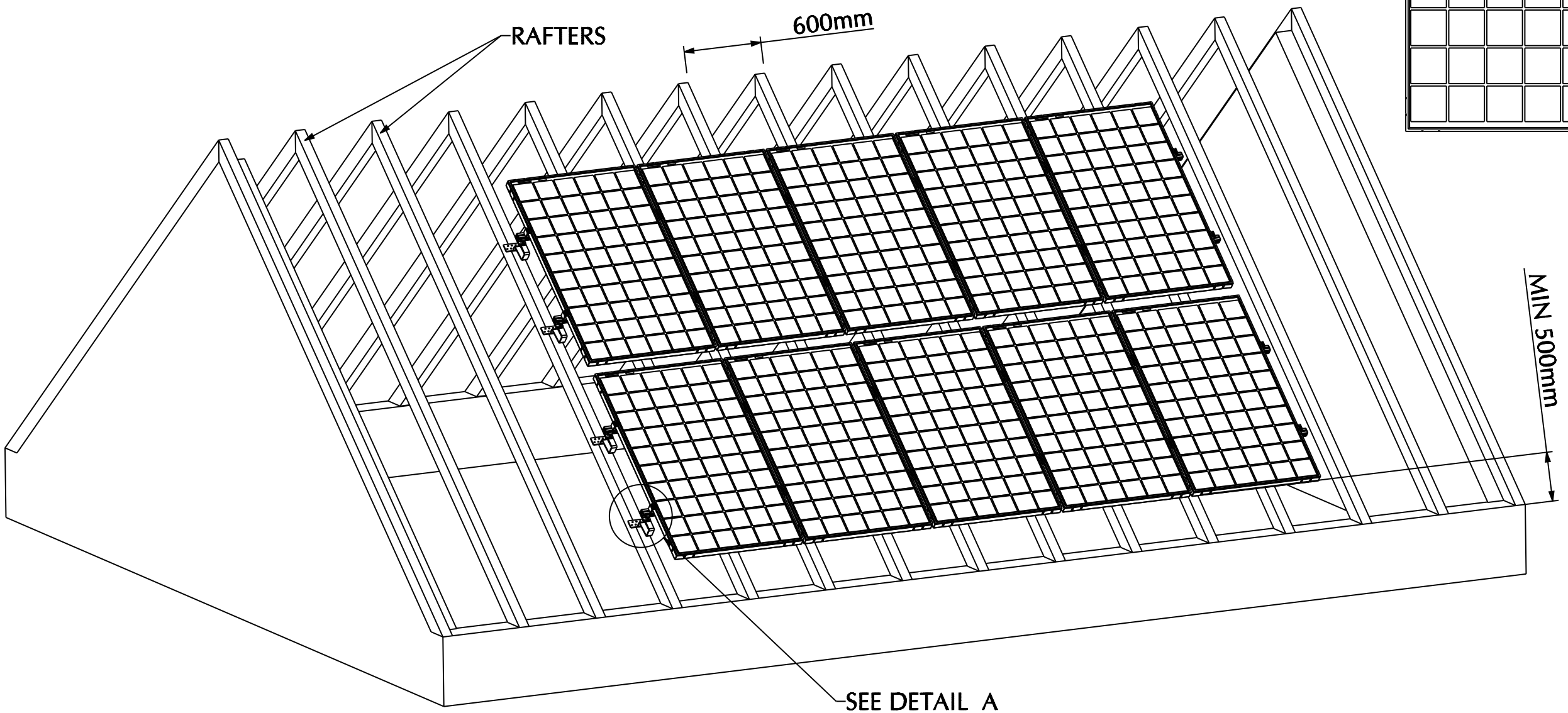

ISSUE	MODIFICATIONS	OCN	APPD	DATE

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THIRD ANGLE PROJECTION

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DRAWN BY	DATE	SCALE	HOLE TOL	GEN TOL
G.Murray	15-OCT-10		+/-0.05	0 +/-0,4
APP'D BY	DATE	DIM IN	ANGLES	0,0 +/-0,2
		mm	+/-0.5°	0,00+/-0,1

MATERIAL N/A

FINISH N/A

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PROJECT SOLAR PV

TITLE
SOLAR PANEL 2 x 5
600mm RAFTER SPACING
NO. OFF:

DRG NO

A3

Sht 1 of 1